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MAN, MIND AND MUSIC

by

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PREFACE

THE title of this book sufficiently indicates its subject and scope. Anthropology is the study of man in evolution and Sociology is the study of man in society. Philosophy and Psychology are the two studies which have the mind of man for subject. Music is the main theme and my four chapters play variations on it. If, like Elgar, I have another theme "that goes through and over" them, it is that music itself is one of the Humaner Letters, that it is capable of serving as an instrument of education, is a part of culture and above all has connexions with the rest of life, which it can enrich to an extent that musicians rarely or hardly realise. I believe also that music offers to anthropologists, philosophers, psychologists and sociologists matter for the enlargement of their own studies. Though I cannot claim profound knowledge of these subjects I have ventured to explore along these lines. In doing so I have uncovered the fundamentals of what I believe about music. The book is therefore in some sense my musical *Credo* and has a basic unity beneath its somewhat wide range of topics.

It was not however planned as such from the beginning. It grew out of papers which I have from time to time read to various societies—the Royal Anthropological Institution, the Incorporated Society of Musicians, the Oxford University Cosmos Society and the lectures which I gave on the Cramb foundation in Glasgow. It incorporates also some small amount of material from lectures and miscellaneous writings that has already appeared in various contexts. Some repetition will be found, but I have thought it no harm to repeat something in one context that has already appeared in another if it saves the reader the trouble of turning the pages backwards and forwards, and still less if it is being discussed from a different point of view. The chief instance of such repetition is what I have to say about imagination and the use of symbols, a subject that arises naturally in the anthropological discussion of primitive art, but is also essential to the psychology of artistic creation and has some relevance to the theory of knowledge. The reader will discover other instances.

ACKNOWLEDGMENTS

I HAVE to acknowledge with thanks permission to print in my chapters on Anthropology the folk-songs I have quoted :—

The Hungarian tunes are reprinted from *Hungarian Folk Music* by Bela Bartok by permission of the Oxford University Press ; the English folk-songs collected by Cecil Sharp by permission of Miss Maud Karpeles and Novello & Co. ; the version of "The Bold Fisherman" from *English Country Songs* by permission of J. B. Cramer & Co. and the Norfolk version by courtesy of Mr. E. J. Moeran ; the Irish tune Ex. 12 from *Songs of Old Ireland* by permission of Boosey & Hawkes. The Negro songs come from *The Book of American Negro Spirituals* by James Weldon Johnson and J. Rosamund Johnson published by the Viking Press Inc. of New York and *Afro-American Folksongs* by H. E. Krehbiel published by G. Schirmer Inc. of New York ; I have to thank these publishers for their permission to quote. The Slovenian tunes are taken from *Malý Spalíček Písni* published in London during the war. The Finnish folk-tunes are from the collection of Dr. Ilmari Krohn.

Other acknowledgements will be found in the text and footnotes. If I have overlooked any to whom I am indebted for ideas, facts and quotations I here and now express my indebtedness and my thanks.

F.H.

ANTHROPOLOGY AND MUSIC

1. PRIMITIVE MUSIC

ANTHROPOLOGY, by definition of the word, is the study of Man. If theology, the study of God, and the natural sciences which study the nature of the physical universe are excepted, it would seem as though all other learning would have to be comprised in anthropology from literature, the reflection of man's mind, to physiology, the knowledge of his body. *Nil humani alienum* would seem to be this science's terms of reference, and the anthropologist would need to be an encyclopædist. In point of fact however the field is mercifully more restricted, though wide enough still in all conscience. R. R. Marett, philosopher and anthropologist, took a wide enough view of its subject-matter because he was a philosopher, and he defined it as the study of "man in evolution." The tracing of the evolutionary process involves history, but the methods employed are those of science. So that anthropology, like psychology and economics, is the application of scientific method to human material and stands somewhere between pure science and the humanities.

If in the literature of this humanistic science primitive man is more prominent than man at higher levels of physical and social evolution, that is due in part to the methods employed and in part, as Marett with sly malice explains, to the origin of the science in that Darwinian revolution of thought which upset man's dignity. Since the subject is a science and not an art it must go and look for its data in the field, not in Aristotle or in history books. Ordinary history is too short for it. So its professors have set forth to the ends of the earth in search of primitive man. Furthermore, primitive man presents human life in its simplest form, and though our would-be anthropologist must not fall into the easy confusion of origin with nature or with worth, the fallacy against which Marett at any rate never ceased to warn him, yet what we are pleased to call the original, which means the earliest known, form of humanity, will give us the clearest, because the least complicated, account of the nature of Man. Has then primitive man anything to teach us about music?

He has. Histories of music wishing to begin at the beginning have speculated regularly, freely and wildly about the origin of music. But they have not been able to go back far enough ; and so like the biologist confronted with the question of the priority of chicken or egg, they have had to substitute for the question, Which came first in order of time ? the question, Which comes first logically ? So they have made a synthetic savage and asked him which he did first, sing or play. The synthetic savage evades the question by replying that he danced before he either sang or played, in other words that rhythm came before melody. For this view there is actually some anthropological evidence, but until anthropological method was called in primitive music was a shifting sand of speculation, in which the historians really read back into the past their own deductions from their own modern experience.

Parry was the first writer to apply to music the methods of Darwinian enquiry. His *The Art of Music* was originally called *The Evolution of Musical Art* and was an attempt to apply to the art of music the concept of evolution which Herbert Spencer had fruitfully applied a little earlier to psychology, sociology and ethics. (Parry began his book in 1884 but did not publish it till 1893 ; Spencer published *The Principles of Biology* in 1867, the *Principles of Psychology* in 1872, the *Principles of Sociology* in 1876, the *Data of Ethics* in 1879).

Parry's second sentence in that epoch-making book asks whether " it is the higher development of an original instinct " which enabled man to rise above the animals. Instinct. His second chapter deals with scales and he surveys ancient Greek and modern Japanese practice ; the Pacific Islands, the Red Indians of North America, Persia, Arabia, India are all searched to provide data for the scientific purposes of framing a hypothesis which is to be verified by later practice. Here we have the same anthropological method as was to be applied fifty years later by Curt Sachs to a more particular problem of musical history (the rise of music in the ancient world in the book with that title). In his third chapter Parry again ranges round the world for folk-music and quotes a little two-bar tune endlessly repeated by the aborigines of Australia.

Field work among primitive man has taken music into its province.

Between then and now the twentieth century has pushed on with the systematic collection of the folk-music of peoples of every degree of cultural development the world over. Already in the nineteenth century some anthropological field work had been done

among primitive and oriental peoples, as the range of Parry's discussion and quotations show. But Curt Sachs goes so far as to say that "no serious research work in the field of primitive music was done before the end of the nineteenth century." Insufficient care was taken to eliminate European or other foreign influences; notation, which hardly sufficed for the transcription of comparatively well-behaved European folk-songs, had to learn how to record microtones and irregular rhythms with some degree of verisimilitude. The phonograph, invented by Edison in 1877, was put to work in 1890 upon recording primitive music. Jesse Fewkes, who is quoted by Parry, seems to have been the first in the field with his work upon American Indians. The machine helped to foster a more scientific spirit among collectors who still stuck to ordinary European notation, and it is common now in books and monographs on folk music to read transcriptions into notation from phonographic records. Erich von Hornbostel (1877-1935), who was at one time head of the Phonogramm-Archiv in Berlin, where records of primitive music were systematically collected, thus made available a large number of melodies of peoples as far apart as Turkey and Tierra del Fuego, Tunis and Siam, India and Indonesia. Curt Sachs, who was associated with von Hornbostel in some of his ethnological studies, draws on his transcriptions extensively in the great book already mentioned. Englishmen who have contributed to this branch of musicology are A. H. Fox-Strangways, who made a thorough investigation of Indian music in *Music of Hindostan* and Dr. John Layard, a field anthropologist who brought back music as well as accounts of social customs from the island of Malekula in Oceania. There is thus a vast corpus of musical material available for comparative study. It would be fascinating to discover and work out a correlation between musical and social phenomena, to find for example that the pentatonic scale was always found at a certain cultural level, that its use went with, say, matriarchy or was racially restricted to dolichocephalic peoples.

But we have not got to that stage and probably never will, not only because the facts are too various and the probabilities too overwhelmingly against any such correlation existing, but because musical and social developments do not in fact go *pari passu*. Sachs enunciates a principle that rules out the possibility of any such neat and scientific hope. He lays down the contrary proposition that the general culture of a people cannot be judged by its music:—

"All the world's tribes, peoples and races have lived in continuous

intercourse since the very beginning of history ; they have met in marriage, trade and war. In this process of exchange and merger, they discard their weapons, tools and implements for better ones. But they preserve their ancient songs ; for singing, an expression of man's soul and motor impulse, has little to do with the mutable surface of life and nothing with the struggle for existence. This is why music is one of the steadiest elements in the evolution of mankind. It is so steady that races of a relatively high cultural level—Polynesians and Micronesians, for example, and many groups of European peasants hold on to musical styles of an astonishingly archaic character ; indeed, of the most primitive character that we know. The general culture of a people, therefore, cannot be judged by its music. But there is hope inversely, that the music of the most primitive peoples has preserved a very early stage of evolution without the interference of higher civilisations." If this is true it rules out any hope anthropologists might cherish that music could show as much correlation with social life, customs and beliefs as does dancing, for instance, which leads directly into ritual, religion, initiation ceremonies and what not. But if musical anthropology remains independent and uncooperative the musical facts are still facts of man's mind and experience, anthropological facts, that is, and as such should be collected, filed and docketed along with other anthropological facts like cranial measurements, social organization and magical practices.

The way forward therefore is not to look for links with social custom but to apply comparative method to the material accumulated and see whether any generalizations about music may be deduced. Certain features are thus in fact found to be universal in the world's music e.g. pentatonism (this has been long suspected), gravitation to a tonic (this seemed probable but it is now established as a fact of human psychology), repetition as a determinant of form (the first lesson in Musical Appreciation) and the widespread existence of polyphony.

It is this last phenomenon, polyphony (polyphony is a better generic term than counterpoint since it has a wider connotation) which has provided a field of operations for anthropological method, and the application of the method of anthropology to a particular set of problems connected with polyphony has produced results that are comparable in kind, though not in quantity or degree, to those achieved by field archaeology in classical studies. Certain historical problems hitherto insoluble have yielded some of their

mystery to anthropological scrutiny. The results are to be found in Curt Sachs's *The Rise of Music in the Ancient World*.

What Sachs set out to do was precisely indicated in the title of his book : he wanted to write the first chapter of a history of music. He found, as all historians of music find, that the beginning eludes him in a continuous retreat and that the *origin* of music insists on describing itself not in historical but in psychological terms : i.e. not that in such and such a place at such and such a time some one first made music, which is what even a myth like that of the infant Hermes and the tortoise attempts to do, but that from such and such human impulses all men always and everywhere have begun to sing, to dance and to play upon instruments. This account of origins leads at once to speculation, not to historical fact—e.g. does song arise from emotional speech, did song come before or after dance ? do song and instrumental music arise from the same impulse contemporaneously ? or is the discovery, say, of the primitive reed-pipe a later development ? and so on. Sachs wanted to cut all this away and to proceed further upon lines which the historians themselves adopt but quickly leave behind, namely the examination of primitive music still surviving. He is driven in on this method all the more because ancient music is not preserved as the building and the artifacts of antiquity have been physically preserved. In the absence of a notation ancient music has virtually perished—the deciphering of Greek notations and the consequent reconstruction of a few surviving Greek hymns from Graeco-Roman times serves, like the exception that proves the rule, to show how irrecoverable is the music of fifth century Athens as compared with its drama. Sachs therefore has fallen back on anthropology to help him solve a historical problem. Acting on the principle already quoted that music may remain stable in a culture that in other ways develops and changes, he looks for his explanation of certain puzzles presented by the music of antiquity to the surviving music of the Mediterranean basin, and checks any deductions he makes against the folk music of the rest of the world.

The two linked problems on which he focusses this new beam of light from anthropology are the nature of Greek music and the rise of polyphony somewhere about 900 A.D., which led in Europe to the complex art of counterpoint and so to modern music by a process of rapid evolution. The connexion between the two problems is the chant of the Christian Church, which was entirely monodic both in Constantinople and Rome and embodied Greek and Hebrew ele-

ments in it. The Byzantine Church framed its scale system on what it thought was ancient Greek practice with the names Dorian, Ionian, Aeolian and Phrygian to distinguish the modes. The Roman Church took over the system, names and all, though all similarity between the Greek and the Gregorian modes with the same names had disappeared in the course of some seven centuries. Plainchant, as reformed and organised by Gregory, retained its character as single-line melody until the first combinations of melodic lines in the form called Organum appeared in the tenth century. What, then, happened to divert the practice of a thousand years into something apparently new in the history of the world? No satisfactory explanation has ever been given. It is not to be supposed that no one had ever before heard a tune sung at two parallel pitches or two tones sounded simultaneously so as to emit a harmony. But it is usually stated that before the tenth century the civilised world disliked harmony because it distracted attention from the subtleties of melody, and that by the eleventh century the world (which for this purpose means the Church) had come to like it. It is just an inexplicable change of taste—such is the best hypothesis so far put forward to account for the undoubted fact that a major change came over music about the first millenium A.D.

Sachs wanted to know what ancient Greek music was like, and since the documents, for all the ingenuity and scholarship that has been spent on translating and interpreting them, only bewilder and give no inkling of the musical experience which the Greeks themselves certainly valued highly, he goes the other way to work. He examines the folk-song of the Near East (Greece drew much of her culture from Egypt and Asia Minor), the Far East, India and Islam, i.e. he collects all the anthropological facts that can have a bearing, direct or indirect, on the problem of the nature of Greek music. Greek music, which divided the octave into two tetrachords in which the fourth is the strong interval, he concludes, is oriental in origin, is essentially vocal and aims at a subtle kind of melody based on fourths and fifths. He arrived at these conclusions by examining the examples of melody at the same evolutionary stage surviving in the Middle East to this day. "The Orient has kept alive melodic styles that medieval Europe choked to death under the hold of harmony, and the Middle East still plays the instruments that it gave to the West a thousand years ago." The major premise is that "music is one of the steadiest elements in the evolution of mankind" (as already quoted). But the argument is not, of course, exhaustive,

and there is no certainty that the music of the Eastern Mediterranean has stood still for more than two thousand years—except that it remains monodic despite all the waves of European influence that roll through these regions. But at this point historical argument from the documents, the theorists and the actual surviving melodies comes to fit in with the anthropological conclusions : each set of facts tends to confirm the other.

The subtlety of Greek music has always been presumed both from the fact that Plato and Aristotle attribute to this art of melody a significance which to us seems fantastically exaggerated (to the point for instance of regarding certain modes as anti-social and politically undesirable) and to the fact that Levantines and Orientals to this day practise monody and are therefore more interested in its expressive possibilities than we are who use harmony for the purpose. I had a curious instance in confirmation of this preoccupation with melody in a student (English but brought up in the Levant) who scored a very high mark in a pitch discrimination test (Seashore's, see below page 111) which I lightheartedly gave to my Appreciation class at the Royal College of Music. Her score was nearly a hundred per cent right and far ahead of the next most acute ear. On my asking her about it she explained that life in the Levant had accustomed her to minute shades of pitch in the subtle melodies employed by Oriental singers. Her trouble was to hear a symphonic movement as a whole : having dwelt in a musical microcosm, she found the macrocosmic music of the West bewildering and her attempts to break it up into intelligible small pieces led to an effect comparable to that of spelling out words instead of reading them. Just as to Westerners unfamiliar with it Oriental melody sounds monotonous—we simply do not hear the minute differences which make it in fact the reverse of monotonous—so to those without a knowledge of this oriental style of subtle melody Greek music refused to yield its secrets, because enquirers automatically applied to it preconceptions, axioms and experience that were harmonic. By means of the comparative method and a recognition of its Eastern origin and character it can now be elucidated, if not recreated. That Greek music was largely Asiatic the Greeks themselves admitted and indeed emphasised. "They credited Egypt, Assyria, Asia Minor and Phoenicia with the invention of the instruments they used, named two of their main tonalities after the Asiatic countries Phrygia and Lydia, referred to Egypt as the source of their musico-pedagogic ideas, and attributed the creation of Greek music to

ANTHROPOLOGY AND MUSIC

Olympos, the son of Marsyas the Phrygian." Sachs adds the comment "with the rise of comparative musicology it has dawned on us that music historians of earlier generations were doomed by their ignorance of Oriental music to misinterpret their sources."

But though melody is the really important element in the world's music up to 1000 A.D. polyphony is not unknown. Here goes one of our illusions, destroyed by field anthropology. Comparative i.e. anthropological methods have revealed that polyphony also is universal, though it is not the predominating factor it was to become in later Western music. "The deep-rooted prejudice that harmony and polyphony have been a prerogative of the mediaeval and modern West does not hold water. Not one of the continents, not one of the archipelagos between them lacks rudimentary forms of polyphony." Primitive polyphony however is not quite like the counterpoint that developed in mediaeval Europe but what has been called heterophony, the practice of singing and playing the same melody with variations in detail and in something less than complete simultaneity, the method in fact of jazz, where individual players on trumpet or saxophone make "breaks" round a common or previously known melody. Sachs describes the practice of Japanese flautists who accompany a singer just behind him "as an aide-de-camp avoids riding abreast of his general." The delays imposed by the singer in such a case upon his accompanists, who must wait while he executes some melisma or decoration of his melody, and the necessity to keep behind lead logically on to something like imitation and canon, and here again examples are not lacking. Sachs quotes one from Malay where overlapping singing by women has developed into a true canon over a double drone of fifths sustained by men, for all the world like a shorter and less elaborate "Sumer is icumen in." Similar examples are quoted from Malacca and from Pygmies in Africa. The drone is perhaps the first stage away from pure monody. The Greeks and some Orientals do not care for the drone on the ground that it confuses the melody, but to some ears the stability of the drone provides a background against which the character of the melody stands out with the greater emphasis. The drone however leads nowhere evolutionarily speaking.

The chanting of the same melody at different times and/or pitches does not always lead to the counterpoint of imitation, canon and fugue. The monks of Mount Athos use a peculiarly distressing form of heterophony in which a prompter sings in a loud voice the verse that the cantor is to imitate after him. As the cantor often

adopts a different pitch, a dissonant counterpoint is generated in which there is a clash of words as well as melody and pitch. The chant proceeds endlessly out of step with itself, a caron that obeys no law but that of lagging behind. A fourth form of counterpoint is the pure parallelism which is implicit in congregational singing where men's and women's voices lie about a fifth apart—soprano, alto, tenor, bass. It was from this kind of singing, which in its commonest form is singing in octaves (though with the customary perversity of all musical terminology it is usually called unison singing), that the earliest form of mediaeval counterpoint originated. Organum consists of the same tune being sung at two different pitches a fourth or a fifth apart.

Ex. 1



This may be compared with a song of boys and girls from the Carolina Islands

Ex. 2



and a student song from modern Iceland

Ex. 3



In (a) the consecutive intervals are fourths, in (b) thirds and in (c) fifths. Mediaeval organum used both fourths and fifths and, also according to *Musica Enchiriadis*, a text book of choral singing of the ninth century, their octaves, so that there could be four parallel lines of the same piece of chant employing simultaneously consecutive fourths, fifths and octaves. Whether the Icelandic student song is a survival of ancient practice is no more to be determined than whether

it is not an original product of a native feeling for this sort of polyphony, such as is shown in examples from primitive peoples. (Examples are known from Tierra del Fuego and the Andaman Islands).

At a later stage in the development of mediaeval polyphony in Europe chains of thirds and sixths are permissible; faux-bourdon or faburden established itself in England, where this use of the 6-3 chord seems to have originated, in the thirteenth century. The use of the interval of the third and its attribution to England, a non-Mediterranean country, provide the next stage in the argument that counterpoint came into being when the monody of the Mediterranean with its fourths and fifths was crossed with the thirds that belong to North European music. Sachs contends that melodies consisting of chains of thirds are characteristic of Europe, as opposed to the fourths of Oriental music inherited by the Greeks and the early Church, and that such melodies are generated more by instruments than by singing. Two thirds, a major and a minor in sequence or superimposition, make a fifth, and the dominance of the fifth at the expense of the fourth, though the two intervals are complementary by inversion, led to major and minor tonality with eventually its dominant-tonic harmony. The point about the preoccupation of ultramontain Europe with instruments, as contrasted with the Mediterranean passion for singing, is confirmed by the familiar antithesis of Italian opera and German symphony in the later history of music, but it is not essential to the argument so long as the fact of the prevalence of the third, whether in a melody or in consonance, is established. For this there is the curious testimony of Giraldus Cambrensis (c. 1188) to the existence of part-singing in Wales and the North-eastern counties of England. What he says is that in Welsh choirs they sing as many parts as there are performers (is this another example of primitive "jazz" counterpoint?) but in the parts of England subjected to the influence of Danes and Norwegians in their raids and invasions "the inhabitants make use of the same symphonious harmony but with less variety, singing only in two parts, one murmuring in the bass, the other warbling in the acute or treble." These words have been usually interpreted on the strength of surviving music as meaning singing in thirds (*cf.* the English *gymel*) or possibly in fifths like that of the still surviving Icelandic (also Scandinavian) *Tvisöngur*, of which an example has already been quoted (above p. 9). The evidence from Scandinavia shows the prevalence of instrumental music which leads more readily to

harmony than does singing, in which the words are important and exercise a restrictive influence on behalf of single-line melody, and the surviving hymn to St. Magnus composed in the Orkneys is an example of organum in thirds. It is not claimed that music based on the interval of the third is a Germanic or North European peculiarity, since Sachs cites examples from Ugro-Finnish and Siberian peoples. But the integration of a melodic music of Oriental origin and tetrachord structure with a different melody of European origin and a third-fifth structure with its tendency towards harmony took place as the music of the Roman Church flowed backwards and forwards over the Alps.

This account of the growth of European counterpoint about the first millenium has some weak links in it, weak not from improbability but from lack of equally conclusive and decisive evidence at every stage alike. But it uses not improbably the various musical facts derived from the new knowledge of primitive music now available. Musicology has been able to rewrite these peculiarly evasive pages of history by virtue of the application of anthropological method to music. It has at any rate elucidated the tangle of Greek music; it has proved that the assumptions about a complete absence of polyphony outside Europe before the Middle Ages are without foundation; it has helped to sort out those musical features which are universal in the world's music—e.g. pentatonism, the tonic, and repetition as a determinant of form—from those which differentiate peoples from one another.

To this ethnological problem of differential features we may now turn.

2. ETHNOLOGY

THERE is no need to go to primitive man for examples of differentiation in their music between peoples. It is easier to scrutinise what is nearer home and of our own time, because it can be done without making the difficult mental adjustments required by any musician who is not a field anthropologist to get, grasp and hold a clear idea of what primitive music really sounds like. Of African music, for instance, von Hornbostel says that more important than the actual notes of the songs are the manner and timbre of singing, since the African is not thinking in terms of scales and intervals but of melodic

movement, while African rhythm is too complex to be felt and studied from its transcribed records, and a European ear hearing it would be so engaged upon the effort of analysis that he might fail to isolate the features for which he was searching. Africa has something to say when that now disreputable word "race" is invoked for purposes of biological differentiation of peoples, but for the moment civilised Europe offers the better approach, which shall be made in the form of questions and instances, to the problems of ethnographical differentiae in music.

Why do Czech folk-songs employ short phrases of two bars or only one bar in length? What is there specially Russian about the falling fourth? Why is the rhythm ♩ found in Scottish and Hungarian tunes? Why do tunes from the Near East including places as far west as Yugoslavia contain the interval of the augmented second? Why is a flattened seventh common in English folk tunes but less common in Irish and Welsh tunes? Why do French tunes tend to have a small compass? Why do Irish tunes favour a feminine cadence of three repeated notes? Here are a few readily identifiable features of rhythm and melody which are distributed among different peoples but which are not sufficiently explained by reference to tradition or cultural environment.

These features could only have come into a tradition because they were liked in preference to others by a particular society, people or race. Once in the tradition there is no difficulty in accounting for their survival. Heredity is no more than the cultural environment in which each generation of singers grows up. Oral tradition by which songs are handed on from one singer to the next is the method of inheritance and there is no need to look for biological factors there. But traditions have beginnings even if they are out of sight in the mists of time, and it seems necessary to postulate an ultimate act of choice far away and long ago. Some of the features, the Scotch snap and the Irish cadence for instance of those cited above, no doubt derive from language, but the men who made the language used that rhythm and that cadence because they liked it. Language, like music, involves sound as well as sense, and primitive man makes his vocabulary by acts of choice among sounds. Ultimate acts of choice were the basis of national and racial characteristics and one finds a group of such characteristics associated in every national or ethnic culture, so that for instance the Hungarians, who still retain their Finno-Ugric racial distinction in "Aryan" Europe, like a certain daintiness in all their ways, fine almost oriental arabesque, a

similar delicacy in the embroidery of their national costume, a peculiar kind of stress in their language and a Scotch snap in their tunes.

None of these are physical characteristics, and when a biologist speaks of race (a word of which all scientists have lately become terrified) he refers primarily to colour of skin, cranial measurements, character of hair, blood grouping and such. No doubt there is some correlation between physical and mental features: it is possible to say truthfully that the African negro has woolly hair, a broad nose and a highly developed sense of rhythm (more highly developed than his sense of melody). The broad nose can be explained by the evolutionary notion of adaptation to environment: geography shaped his nostrils as it gave suitable pigmentation to his skin. But geography does not explain his rhythm. The only answer is that he likes his rhythm that way because he does, because it is in fact his nature to be rhythmic. Which is the only answer that can be given to that frivolous but searching question "Why do gentlemen prefer blondes?" Because it is the nature of the beast. The explanation is adopted for sexual selection, which is completely mysterious. Why did Burne Jones so much like a peculiar type of female beauty (that of Elizabeth Eleanor Siddall) that his women are all alike? The ultimate and inexplicable choice of Miss Siddall, the attraction of blondes, the negro passion for rhythm are all instances of ultimate acts of choice, and are no doubt in the last resort biological, due in fact to something in the blood. Similarly the acts of choice represented by falling fourths in Slavonic, rising sixths in Celtic and augmented seconds in Levantine music must be racial (in the sense that they are in the blood). Here are some examples—two each of Russian, Slovenian, Hungarian, Yugoslav and Irish tunes in which certain melodic or rhythmic features are marked as characteristic.

Ex. 4



Ex. 5



Ex. 6

SLOVENIAN 2



Ex. 7



Ex. 8

HUNGARIAN



Ex. 9



Ex. 10

JUGOSLAV
Tempo rubato

Ex. 11



Ex. 12

IRISH



Ex. 13



In the Russian tunes the falling fourth is of such frequent occurrence as to determine their character, though one is slow and the other lively. In the Slovenian tunes it is the phrase-lengths which are the characteristic features—the repetition of one-bar phrases can be paralleled in Dvorak's themes. In the Hungarian tunes the Scotch snap is the feature that strikes the ear most strongly; in the Yugoslav tunes it is the interval of the augmented second occurring in tunes of small compass that makes them unmistakably oriental. The two Irish tunes are based on the interval of a sixth, which is not necessarily a leap but employs passing steps on the way; they are mostly rising sixths but the first of the pair has one salient falling sixth.

These tunes are samples. To establish the case scientifically that the prescribed features are hall-marks of Russian, Hungarian, Irish origin, statistics not samples would be required. The statistician would want to know how many tunes were examined and of them how many contained the feature in question with the answer in percentages. But scientific method is not the only path to knowledge, and humanistic sciences like ethnology are only susceptible to strictly scientific treatment so far as the subject-matter allows. So in dealing with the tiresome but unavoidable conception of race it is not possible to apply as much of strict scientific method as can be applied to the natural sciences. Psychology and economics are other examples of studies which employ scientific method upon humanistic material and it is not possible in them either to employ the quantitative measures and laboratory technique of chemistry and physics, though they do lend themselves to a measure of statistical handling. Simpler and more immediate than science is recognition. If in the course of years of casual observation one is struck by the occurrence of this or that feature in tunes of this or that origin, as I have been, you do not have to search for instances, they rise up and strike you again and again. One may dispense with statistics. And so one proceeds to the second stage of scientific method forthwith and frames the hypothesis that these musical features have some ethnological significance.

But caution is necessary. If on the one hand one refuses to submit to the present prohibition by scientists of the use of the word "race" (biologists like Dr. Julian Huxley and A. C. Haddon, who in *We Europeans* prefer the circumlocution "ethnic group," and anthropologists in general, who are also cautious about the obstinate and vague term "race"), one must not on the other hand claim for the element of blood what can be accounted for otherwise. Thus it

can be urged that racially Slovenes and Russians are both Slavonic people but do not show identical predilections in music, and the prevalence of the Levantine scale with its augmented second in Jugoslavia can be accounted for by religion—it occurs in those regions formerly under Turkish rule where Mohammedanism was the dominating cultural influence.

These European tunes would most naturally be described in terms of nationality, in which blood is only a small factor. But it is a factor in spite of migrations, inter-marriage and political intermingling. Nationality implies ties of geography, of citizenship, of traditions, of language and of herd feeling. But when peoples live together in one geographical area there will also be plenty of blood ties even though they are not pure in a stock-breeder's or a biologist's sense. The nation is a comparatively recent form of human grouping and differs in obvious particulars from the groupings of antiquity, of the middle ages or of stone-age man. Nevertheless at a time when European civilisation was essentially one, when the Roman Catholic church kept it homogeneous and before the growth of nation-states had divided it and antagonized its parts, it was possible to detect differences among its peoples. Latin for instance was not uniformly pronounced but everywhere approximated its sounds to that of the local vernacular. Similarly, polyphonic music of a uniform style was sung all over Europe with an identical Latin text, but the suavity of the Italians was not reproduced in Spain or England—Palestrina, Victoria and Byrd are distinguishable on quasi-national lines. Indeed the English delight in false relation and semi-tonal clashes remains an English characteristic from that day to this—an ethnological trait of harmony !

How far then can one regard these stylistic features as ethnological traits ? The answer would seem to be that peoples, whether organised in nations or distributed about the world in races, exhibit a number of corporate characteristics, which include language, religion, social custom and political organisation. Among these corporate traits are certain musical peculiarities. In some cases the musical peculiarity may have an obvious connexion with language, as in the Hungarian instance, or may belong to a geographical area—the scale of two tetrachords each containing the interval of the augmented second is found all over the eastern end of the Mediterranean basin. But in the last resort every ethnic group fashions its music, as it does its dress and its customs, in accordance with its natural likings and preferences. It is the business of ethnology to

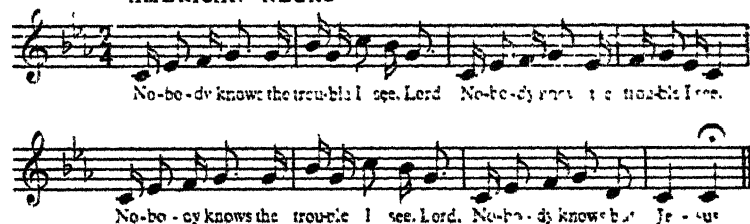
study comparatively the culture as well as the physical types of races and peoples, and music offers such a field of study to the ethnologist.

Study and discussion are made difficult by the slipperiness of the terms race, people, nation. When scientists even of the standing of Dr. Huxley deny racial characteristics to the mixed peoples of Europe and demonstrate the untrustworthiness of appearances they do so in the interests of more scientific terminology, they wish to reserve "race" to major colour divisions of humanity, but "race" ever since Herodotus used the word has declined the rigidity of science. It means no more than the factor of blood relationship which in its turn determines physical features, which any man in the street can recognise at a glance. Recognition in fact, for all the mistakes it can make in individual cases, is more reliable in dealing with humanity than scientific demonstration. There was an Oxford physiologist who when the starvation of Europe after the second German war was under discussion averred that if the British doctored the flour of which their bread was made and caught fish they could dispense with meat, fat, proteins, sugar and sugar confections altogether. Such a chemical statement rebuts itself, and it was significant that the scientist did not suggest sending the bread and fish to starving Europe. Similarly Dr. Huxley in demolishing the pestilent race nonsense talked by Nazis overproves his case when he asks us to leave out physical inheritance from the concept of nationality. Race was used vaguely by Herodotus, erroneously by Max Müller when he confused it with language, and perniciously by Hitler for political purposes, but it is in fact a concept we cannot do without, and if we use it with just that degree of imprecision that honest common usage from Herodotus onward allows we may recognise racial distinctions in Europe and study them ethnologically.

"Race" and "people" have been distinguished by Mr. T. K. Penniman in his definition of ethnology. "Ethnology" he says "is the application of any or all of the methods of anthropology to the comparative study of races or peoples, a race . . . being distinguished by physical characters and a people . . . being distinguished by cultural characters." If we are on treacherous ground in speaking of race in Europe we are at any rate safe in Africa. Broad nostrils, black skin and fuzzy hair are undeniably racial traits. How about negro music? Von Hornbostel specifies three main characteristics, antiphony, a polyphony derived therefrom, heterophony (i.e. what I have described as jazz counterpoint, that is the same melody performed simultaneously by several persons who introduce individual

decorations and variations of it as they proceed) and highly developed rhythm. The negro's feeling for rhythm affords a curious case of heredity and environment being at war when it is transported to America. In the negro songs (especially the spirituals) the African's rhythm, the racial element which I am so hazardously postulating, has married with European melody and harmony. The negro is extraordinarily suggestible to Christian ideology and brings to bear on it his native power of symbolizing: the river Jordan, ships, chariots and even the train are examples of images caught up and used as religious symbols in his spirituals. He has taken from the hymn book at the same time as the symbols and the doctrine the major and minor (more major than minor) scales and the elementary harmony of European hymns and singers. But over rhythm he is obdurate. He shows great skill in absorbing any obstacle of biblical phrase into his time-keeping. But the native negro rhythm persists, and it is this curious marriage of black and white that gives the tunes their distinctive character. The two examples ("Nobody knows" and "Do not touch") show syncopation and anticipation of the beat respectively.

Ex. 14 AMERICAN NEGRO



No-bo-dy knows the trouble I see, Lord. No-bo-dy knows the trouble I see.

No-bo-dy knows the trouble I see, Lord. No-bo-dy knows the trouble I see.

Ex. 15



Do-dn't touch my gar-ment, Good Lord, Good Lord. Do-dn't touch my

gar-ment Good Lord, I'm gwine home - To yo' God an' my God, Good

Lord, Good Lord, To yo' God an' my God, Good Lord, I'm gwine home -

African music, as opposed to Afro-American, does not normally show these identical features because African music is not in two-four or common time, but the dislocation of accent is what the negro feels in his blood in the absence of the drum rhythm which is the normal accompaniment of African native singing. A certain amount of music from various parts of Africa has been recorded and scored. Some of it makes quite an elaborate score in which women and men sing different parts, while hand-clapping and drumming maintain a complex counterpoint of rhythm, with in some instances dance-steps thrown in into the bargain. It is the itch for this very subtle rhythm, so complicated as to baffle the European ear, that has made the negroes of America impart a syncopated rhythm into the music which they adopt and adapt from white sources. This is a new American folk-music—American as far as geography goes, but African by race. We have here then precipitated before our very eyes a racial element, using the word "racial" in one of the few senses permitted by scientists, persisting in the different music of another race.

A cautious step along the same road will bring us back home to Europe again—to the Hungarians and Finns of Eastern Europe in fact. Finno-Ugrian is the description of a family of languages, just as Aryan is. But it is also applied to the speakers as well as their speech and there is a certain homogeneity of physical characteristics among Finno-Ugric peoples, though, as always in such cases, uniformity of physique and temperament must not be expected as though whole peoples ever bred pure. No more scientific precision must be demanded than the subject-matter will bear, but because resemblances between different members of the same ethnic group or related groups cannot be scientifically accounted for it does not follow that they must be regarded as fortuitous, or merely coincident or non-existent. The relationship of languages is admitted, but though foreigners can learn a language that is alien to them and there can be a spill-over of foreign words into the main language, language and the blood relationship of its speakers will tend to go together. In eastern Europe political changes are being made as Germans are being expelled from Poland and Czechoslovakia and in America the English language is being transformed by words and usages seeping into it under pressure of the non-Anglo-Saxon immigrants to the U.S.A. No one is to say how much Slavonic blood is to be found in the Prussians and the Sudeten Germans nor what is

the exact proportion of British blood in the American population of to-day. But it is not going too far to postulate some biological foundation for linguistic peculiarities even after centuries of mixed breeding, for dominant characteristics survive. The Hungarian language has maintained itself in Europe for a thousand years, and even if Magyar physique has in that time been modified by factors of geography and breeding ethnologists see in their fondness for horses another remnant of their ancient nomadic life which they shared with their kindred tribes of Huns and Turks, both branches of the Finno-Ugrian family.

Hungary and Finland in fact yield some interesting evidence for our musical enquiry. Since their languages are akin some resemblances may be expected in their folk-song. Bartok has made available to Western Europe a summary account, furnished with ample examples, of Hungarian folk-song. Finland's folk music was collected in the middle of the nineteenth century as part of the movement which caused the *Kalevala* to be written down, the antiquities of Finland to be studied and its history written. Three volumes were published by Ilmari Krohn, one containing spiritual songs, not apparently true folk-songs but popular hymns, and one containing dances which have a modern look—the first dance tune in the book which was taken from a collection of 1809 has a section marked "Trio"—and even so primitive a tune as this

Ex. 16



is plainly a modern waltz, while polkas, minuets and other non-indigenous dance forms are common in the collection. The third volume of folk-songs is quite another matter and certain characteristics leap to the eye, which would seem to have ethnological significance.

Hungarian folk-song provides a stronger argument for an ethnological rather than a national-political explanation of musical

idiom than any of the other European tunes yet examined. Bartok mentions three characteristics of Hungarian peasant music, which it should be noted is not the same thing as the gypsy music with which Liszt and to some extent Brahms confused it. These are

- (1). a structure in verses of equal lines, which he calls isometric,
- (2). pentatonic formation,
- (3). what he calls *tempo giusto*, i.e. strict rhythm consisting mainly of equal values only modified so far as to accommodate the accentuation of words.

These three features he declares are typical and differentiate Hungarian peasant music from that of any other nation. The last feature, however, of equal note values is shared with Finnish music and is the racial factor which I am trying to isolate. Bartok goes on to argue that the Hungarian peasantry has preserved these old idiosyncrasies without being hostile to invention. Hence it comes about that new songs in a new style (the nature of whose evolution he describes) are homogeneous with the old, in spite of the alien elements breaking in upon the Danubian plain from across the frontiers. "That these alien influences," he concludes, "did not seriously interfere with the national character of Hungarian music at the new stage in its evolution is the best possible proof of the independence and the creative power of the Hungarian peasantry." In fact the same force, now no doubt national-political in character but surely containing a strong racial element persisting through more than a thousand years of history—since nationalism is a modern phenomenon—the same force, that preserved the Magyar language against all the undermining influences of Europe, has preserved also the identity and character of Hungarian folk music.† A few examples may be quoted.

Ex. 17

Tempo giusto



† This stability is a confirmation of Sachs's theory that music is a stable feature in a developing culture—though he is speaking primarily of more primitive cultures. Bartok, however, does distinguish some features that have permeated from one to another of the various populations of the Danubian plain—Hungarians, Slovaks, Ukrainians, Romanians, Ruthenians, Moravians, Galicians and such.

Ex. 17 shows the *tempo giusto* and rhythm of repeated equal notes, the Scotch snap of Hungarian accentuation, pentatonism modified only by the passing supertonic in the last bar, the isometric two-bar phrases.

Ex. 18



Ex. 18 is more like the conventionally Hungarian song popularised in Western Europe by Korbay and by Liszt. It lends itself to gypsification, i.e. to ornamentation, to portamento, and to extreme variations of tempo. (It is noteworthy that there are no marks indicative of speed variation in Bartok's collection, the feature which of all others is most conspicuous in Brahms's Hungarian Dances. Bartok differentiates peasant music from the popular art tunes which are the favourite material of gypsy fiddlers, and declares that there is no such thing as gypsy music but only a gypsy mode of performance). In this tune the supertonic is missing and the sixth degree only occurs as a passing note.

Ex. 19



Ex. 19 shows the *tempo giusto* formation. The curious C sharp is due to the (probable) derivation of the tune from an opera (1844) of Francis Erkel, but whatever the origin the tune has been submitted to the process of oral transmission and taken on folk character, though Bartok classes it with tunes that are not pure peasant and show alien characteristics.

In the case of Finland an additional process of isolating ethnological idioms can be employed by studying not only folk-song but Sibelius. Sibelius in fact provided the clue which led to the dis-

covery of the link with Hungary. The clue is his use of repeated notes in melody, and repeated notes often of equal time values, like the *tempo giusto* postulated of Hungarian tunes by Bartok. The best known of all straight-line tunes (second only to the "Lost Chord") is the oboe melody in the trio of the scherzo of the second symphony.

Ex. 20



The main features of this tune, if lack of features can be called a feature, are its monotony alike of pitch and of rhythm. Either feature might be found alone: reiteration of a single note in a well-marked rhythm—the fanfare figure in "Finlandia" is an example, though one would hardly isolate it as a feature of Sibelius's style because of its fanfare function; or better still, the G major tune in "Valse Triste," or the repetition of notes of equal time-value but of different pitch—an example is the melody of the Romance in D flat for piano which is maintained throughout the piece but for the cadenza which does duty for middle section.

Ex. 21



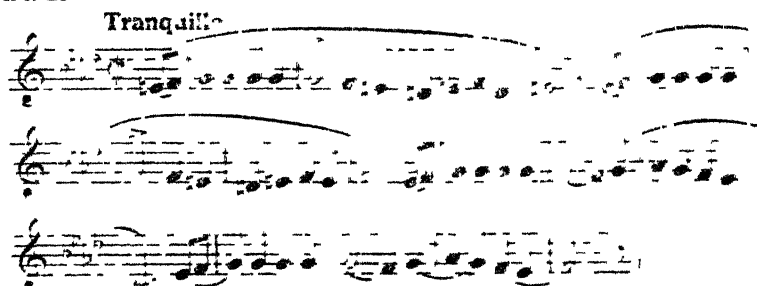
Ex. 22



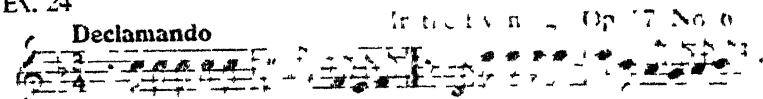
But the combination of the two features in this oboe tune is remarkable. Besides this tune from the second symphony the following examples can also be adduced:—

Ex. 23 The Old Song Op. 46 No. 4 in the piano version but also found as "The Three Blind Sisters" in the incidental music to *Pelleas and Melisande*; and Ex. 24 the song Op. 17 No. 6 "In the Evening" marked *declamando* and therefore corresponding to what Bartok calls *parlando-rubato*, though the notation gives equal quavers and the pace ensures that there is not a great deal of rubato in this song.

Ex. 23

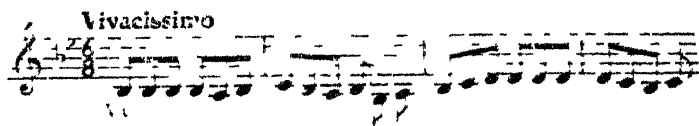


Ex. 24



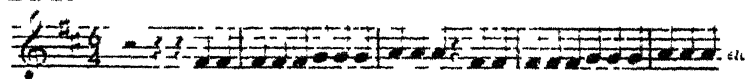
In Hungarian music the absence of anacrusis ensures that tunes like Ex. 17 begin on the first strong beat. Sibelius may do this in appropriate cases, as in the scherzo of the second symphony

Ex. 25

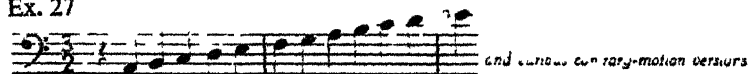


(Ex. 25) But as an instrumental composer not tied to words, either Hungarian or Finnish, he more often uses figures in which the first strong beat is avoided. The Romance in D flat already quoted (Ex. 22) is an instance, so are the opening of the second and seventh symphonies. (Exs. 26 and 27).

Ex. 26



Ex. 27



Other instances could be quoted of Sibelius's partiality for even time-values : e.g. from *En Saga* (Ex. 28). They are one of the

Ex. 32



It is tempting to argue that since Sibelius never went to school like Vaughan Williams with his country's folk-music but instead sought cosmopolitan education in Berlin and Vienna these idioms are the promptings of his race, but it is dangerous to argue from heredity since in Sibelius's case there is a strong Swedish strain in his make-up, and though this particular argument can to some extent be met by claiming that Finnish characteristics are dominant and Swedish recessive, it cannot be pressed.

But the racial argument looks a little more plausible, though still incapable of proof, when one compares these Finnish traits with those of Hungarian folk-song. Compare for rhythm and behaviour, though not perhaps for contours the two tunes already quoted Ex. 17 Hungarian and Ex. 31 Finnish or Ex. 19 Hungarian with Ex. 33 Finnish.

Ex. 33



It is not suggested that close resemblances lie open to the casual eye between the bulk of Finnish and the bulk of Hungarian songs, but if one reads a great many of them resemblances in behaviour rather than in contour may be discerned. First of all there is common to both the absence of anacrusis. This is in itself unusual, and so strong is the psychological urge towards an upbeat or an intake of breath before singing that, as is recorded by Kodaly, Hungarian singers often vocalise an introductory exclamation though the note so uttered does not properly belong to the tune. Anacrusis are occasionally found as part of Finnish folk tunes but they are rare. Then there are the features to which we have devoted most attention, level notes, crotchets or quavers, and repeated melody notes. There are many Hungarian tunes of the parlando type like Ex. 17

above, in which the song begins with a patter-like recitation, as there are in Finland, but the Hungarian are more melodically minded than the rather flat-footed monotonous Finnish tunes and the phrases are not so prone to stick to one reciting note. The Hungarian tunes are on the whole better tunes and there is more rhythmic variety, notably the Scotch snap. But the family relationship is pretty clear notwithstanding the temperamental differences between the two peoples and the character of their tunes.

When then does this evidence amount to ? It is not and cannot be conclusive, but if anyone knows a better explanation than the ethnological one of the behaviour and the physiognomy of folk-tunes let him produce it. Language will be his first proposal—affinity of language probably accounts for the lack of anacrusis and perhaps the other features common to Finnish and Hungarian tunes—but language does not go far enough. Language was first spoken by kinsmen and though men may change in breeding while their language remains relatively constant, their music is the most stable thing about them—it is the common property of blood relations. Nationality, in which blood counts for less than language, geography and custom, is no doubt responsible for some of these differences of rhythm and interval. But it is noteworthy that whereas the different branches of the Slavonic family show their own musical features—the short phrases of the Czech, the marked rhythms of the Poles, the favourite intervals of the Russians—they all unite in an addiction to extreme contrasts of emotional expression in close juxtaposition. The stolid Englishman thinks that violent changes from grave to gay are a sign of madness of the maniac-depressive type, but the Slav of eastern Europe has a highly developed musical form called the *Dumka*, which Dvorak frequently employed, in which a lament alternates with wild exhilaration. Geography may account for the staid character of Scandinavian folk dances and their music as compared with the vivacity of the Italian tarantella. But it seems likely that when all account is taken of these major factors there remains an ethnological basis for such very striking differences of musical idiom as we have surveyed in this chapter.

3. ENGLISH FOLK SONG

THE study of folk-song besides telling us something about primitive man and something about his ethnic differences will also provide a

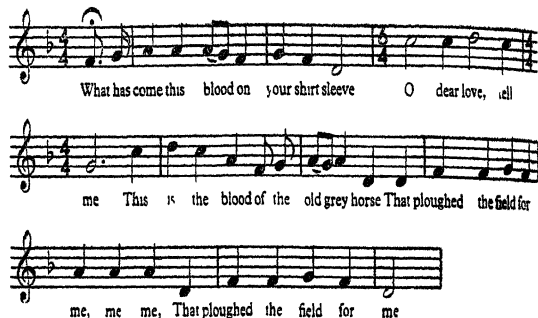
path to quite another branch of anthropology. Anthropology is not necessarily confined to the study of primitive man but may take its material from higher levels of culture. If Marrett's definition of "Man in evolution" is accepted, the higher stages of the process are admitted and the subject-matter enlarged to include besides race, questions of language, social organisation, law, morality and religion. All of these, which are the chapter headings of his little manual which he wrote for the Home University Library, with the addition of symbolism and folk custom, may be found embedded in the song texts of folk-music. While the collection of tunes from exotic, primitive and remote peoples will provide evidence for the origin of music, for the priority of rhythm, for the influence of instruments, whose primary function was rhythmic, upon compass and style of melody, the collection of the folk-songs of people who may be illiterate but are highly developed in the scale of civilisation and culture will provide texts which have only to be scratched in order to yield a wealth of anthropological material. Our English folk-song, which represents perhaps some five centuries of popular music, is rich in texts that tell us a great deal about law, custom and religion, as well as about fundamental traits of the human mind, such as its innate addiction to symbolism and magic. The music is secondary to the words in this part of the enquiry but it is the door through which the words are approached. These texts have been preserved in music. The folk-song lives by its melodic quality. It is passed from singer to singer, from one generation to another of unlettered artists. The tune is a mnemonic for the words, no doubt, in a long narrative ballad, and specifically musical merits are not to be expected in a tune that has to serve for half a hundred stanzas which describe a changing situation, but the tune is part of the ballad, its chief preservative until it gets into print and not even then to be discarded, as the literary scholars who took up the study of the ballads from Bishop Percy onwards so lightly discarded them. In the love songs, the idylls of country life, the merely cheerful ditties, the tune is now regarded as possessing the greater artistic merit—folk-poetry is the poor relation. But from the point of view of science, our science of anthropology, the words of the songs are a gift to us from the music. Let us look at some of them.

The ballad "Edward" is of great artistic merit and though not particularly rich in anthropological content tells us something about law and custom in an agricultural society. It is one of the most widely distributed of ballads. Probably Scottish in origin—Percy

in his *Reliques of Ancient English Poetry* gives it in Scots and say he took it from a manuscript transmitted from Scotland—it has travelled east to Sweden and Finland and west to the Kentucky mountains of America where it was found by Cecil Sharp, whose version is here printed.

Ex. 34

Pentatonic



What has come this blood on your shirt sleeve ?

O dear love, tell me.

This is the blood of the old greyhound

That traced that fox for me, me, me,

That traced that fox for me.

It does look too pale for the old greyhound

That traced that fox for you, you, you,

That traced that fox for you.

What has come this blood on your shirt sleeve ?

O dear love, tell me.

This is the blood of my brother-in-law

That went away with me, me, me,

That went away with me.

And it's what did you fall out about ?

O dear love, tell me.

About a little bit of bush

That soon would have made a tree, tree, tree,

That soon would have made a tree.

And it's what will you do now, my love ?

O dear love, tell me,

I'll set my foot in yanders ship,

And I'll sail across the sea, sea, sea,

I'll sail across the sea.

And it's when will you come back my love ?

O dear love, tell me.

When the sun sets into yonder's yew-tree tree,

And it's that will never be, be, be,

And it's that will never be.

Curiously enough the only English version of this song—without its title—occurs as an interpretation in the Chaucer Society's *Play*.[†] In this version the cause of the quarrel is

Because he kiled two pretty little birds

Which flew from tree to tree,

whereas in Percy's Scottish version no cause of the quarrel is given, and it is a father and not a brother who is murdered. But most versions assign a tree as the source of the dispute. It sounds very much like a case of removing a neighbour's land-mark, an offence against law, though that interpretation goes a little beyond the actual evidence—the one brother may have chopped down his brother's sapling merely out of spite. In any case however the price of blood is permanent exile. And its irreversibility is expressed in the poetic motif of the impossible return.

Play on the impossible is a form of poetic hyperbole not uncommon in popular art and popular wisdom. It occurs in riddles, in protestations of love and in religious imagery. Riddles and poetry sometimes go together in a song, as in these two, one from Dorset and the other from Kentucky.

Ex. 35

The musical notation consists of four staves, each with a treble clef and a key signature of one sharp (F#). The melody is written in a simple, folk-like style. The lyrics are written below the notes, with some words split across lines.

Lyrics: I will never be back where I may be And one day I will be back

† See *The Journal of the English Folk Dance and Song Society*, Vol. III, No. 3, 1938

My head is the apple without e'er a core,
 My mind is the house without e'er a door,
 My heart is the palace wherein she may be,
 Ans she may unlock it without any key.

Ex. 36

I gave my love a cher-ry that has no stones, I
 gave my love a chick-en that has no bones, I
 gave my love a ring_ that has no end, I
 gave my love a ba-by that's no cry-en.

How can there be a cherry that has no stones?
 How can there be a chicken that has no bones?
 How can there be a ring that has no end?
 How can there be a baby that's no cry-en?

A cherry when it's blooming it has no stones,
 A chicken when it's pipping it has no bones,
 A ring when it's rolling it has no end,
 A baby when it's sleeping there's no cry-en.

There is nothing very deep about these two songs, but they enshrine at least two fundamental impulses of the human mind, that of making puzzles with which to challenge curiosity and that of making symbols, the one an exercise in intellect and the other in imagination. In these riddles both impulses are united in one. The answer to the riddle may also contain that element of the unexpected which constitutes wit, as in the schoolboy's riddle "When is a door not a door? When it is ajar." This kind of riddling word-play is even used by Plato to elucidate the metaphysical problems of reality and particularity. In trying to establish the difference between universal ideas and particular instances he argues that a particular object

which is called beautiful is not absolutely beautiful but may even in some aspects be ugly. In the shifting world of sense the object may both be and not be beautiful. In fact, he says it is like the puzzle one hears at dinner or the children's riddle about the eunuch and the bat.† This riddle which he thus refers to but does not actually quote runs thus :—

ἄνθρωπος οὐκ ἀνθρώπος, ἀνθρώπος ὅμως,
ὄρνιθα κύνη ὄρνιθα, ὄρνιθα δὲ μὲν
ἐπὶ ξύλῳ τε κύν ξύλῳ καθιμένην
λίθῳ βαλὼν τε κύν λίθῳ οὐάλεσει.

A man who was not a man but a man nevertheless
Killed a bird that was not a bird but a bird none the less
Sitting on wood that was not wood yet wood after all
With a stone not a stone yet a stone none the less.

The answer is a eunuch, a bat, an elder and a piece of pumice. (The elder has a pithy stalk).

This intellectual sport of children invoked by Plato has that fundamental power of seeing resemblances which is at the back of all metaphor, simile and symbolising, which is also the root of poetry—"the poet is a master of metaphor," said Aristotle. The poetic element is predominant in the Dorset riddle-song ; there is wit in the conclusion of the Kentucky riddle-song.

If we go on from the wisdom of babes to the poetry of adults we shall find in English folk-poetry a wide use of poetic symbolism. At all stages in his evolution man is also poet. It must suffice here to choose four examples, two religious and two erotic—if that is the right term to apply to anything so unvoluptuous as English folk-poetry and folk-music. In "The Dilly Song" various truths of Christian doctrine are promulgated, and the song may indeed possibly be a mnemonic for the Creed. Versions of this song will be found in *English County Songs*, where it is called "The Twelve Apostles," in *Songs of the West* and as a carol (taken from Sandys's Collection of 1833) where its title is "In Those Twelve Days," and in the *Oxford Carol Book*. The title "Dilly" comes from Cornwall, of which the meaning is uncertain, unless it is Celtic, like the Welsh *dillyn*, for gay or pretty. As "Green grow the rushes" it is known traditionally at Eton, and an echo of it appears in *The Yeoman of the*

† Plato : *Republic*. Book V, 479.

Guard when Sullivan takes a hint from tune and words in the opening phrase "I have a song to sing O" and makes the song cumulative by extending the length of the verses as an allusion to the progress of the numbers one to twelve in the original. The song begins:

I'll sing you one O, Green grow the rushes O.
 What is your one O?
 One and one is all alone
 And ever more shall be so.

The numbers proceed to twelve:

Two for the lily-white boys,
 Three for the rivals (or strangers),
 Four for the Gospel makers,
 Five for the symbol at your door,
 Six for the six proud walkers (or the ferryman in the boat),
 Seven for the seven stars in the sky (or the seven liberal arts),
 Eight for the eight bold rangers (or angels)
 Nine for the nine bright shiners (or the pale moonshine),
 Ten for the ten commandments,
 Eleven for the eleven who went up to heaven,
 Twelve for the twelve apostles (or the tribes of Israel).

Endless versions with endless variants have been recorded in German, Flemish, Hebrew and Breton. The first English version is found in an almanack of 1625, which however was based on an older carol. The riddling symbols are liable to varied interpretations but they are mostly Christian. The symbol at your door is the pentagram chalked up to keep away the evil one which is magic in a Christian context, and the seven stars are the Great Bear which is astrology grafted on to theology. The interpretation of the list just given is:

Two—for Christ and the Baptist, or Gemini.
 Three—for the Trinity (or the Wise Men from the East).
 Four—for the Evangelists.
 Five—for the single-line pentagram.
 Six—for the water pots at the feast of Cana.
 Seven—for the Great Bear as the crown of heaven, or as in the carol version, the seven liberal arts of the mediaeval trivium and quadrivium.
 Eight—for the archangels or alternatively the Beatitudes.
 Nine—for angels again, or in the Hebrew version the months preceeding birth, or the nine Muses, or the nine joys of Mary.

Ten—for the Commandments (there is an verbal agreement on this).

Eleven—for the Eleven Virgins (as for the eleven thousand virgins of St. Ursula).

Twelve for the Twelve Apostles.

It is fascinating to compare the versions and to track down their interpretations, for often the connection is significant.[†] Here then is more riddling and more poetry, some instruction, more religion and a great deal of symbolism. There may even be a further anthropological element in the song, namely disguise. In ritual dances the dancers often wear masks or black their faces and call themselves "guisers" (i.e. disguisers, men in disguise) a term found in Cornwall and in Scotland, and the purpose of the disguise is like that of putting on uniform—to remove your individuality and so become not a person but an officer discharging an office. The priest in wearing his vestments puts off his humanity and becomes an official capable of dealing with divine powers, divine powers which must be handled discreetly and according to rite and rule. So in this song the images are divine powers which may not be lightly handled in frank discussion but must be disguised if they are to be sung by an ordinary man who has not the rite or the vestments of the qualified priest.

A similar religious interpretation is required of what appears on the surface to be a love song of a type fairly common in English folk-song, in which one of the parties marries out of the proper class, a farmer weds a lady, or a lady runs off with the gypsies and so on. "Down by the Riverside" or "The Bold Fisherman" is found widely distributed. It was collected in Somerset by Sharp, in Dorset by Hammond (c. 1910), by Lucy Broadwood in Hertfordshire (c. 1890) and by E. J. Moeran in Norfolk (c. 1920).

Four versions are here appended, in which it will be observed that 5/4 time is persistent.

[†] See *Comparative Studies in Nursery Rhymes* by Lina Fehenstein.

Ex. 37

THE BOLD FISHERMAN (DORSET)

As I walk'd out one May morn-ing down by a riv - er

side, Twas then I spied a fish-er - man come row-ing down the

tide "Good morn-ing to you, fish - er - man! how

come you fish - ing here?" "I'm fish-ing for my

la - dy fair, all down the riv - er clear'

Ex. 38

AS I WALKED OUT (HERTFORDSHIRE)

As I walked out one sum-mer morn-ing on pur-pose to

meet my bride Oh there I saw my

fair pret-ty maid come row - ing down the tide

ENGLISH FOLK SONG

37

Ex. 39

DOWN BY THE RIVERSIDE




Down by the river side
 I be - held a bold fish - er - man
 Come row - ing by the tide
 I be - held a bold fish - er - man
 Come row - ing by the tide

Ex. 40

THE BOLD FISHERMAN

SOMERSET



A bold fisherman
 side, The bold fisherman
 Come roll - ing down the tide

Bold fisherman, bold fisherman, how come you fishing
here ?

I'm come for you fair lady gay
All down the river clear.

He tied his boat unto a stand,
And to this lady went ;
For to take hold of her lily-white hand
It was his full intent.

Then he unbraced his morning gown,
And gently laid it down ;
When she beheld three chains of gold
Went trinkling three times round.

Down on her bended knees she fell
Crying : Pardon, pardon me
In calling you a fisherman
Come rolling down the sea.

He took her by her lily-white hand,
Crying : Follow, follow me
I'll take you to my father's house
And married we will be.

Here the symbolism is a deeply submerged allegory dating from the time of the early church. The clue to it is *fish*. Early Christians used the word or picture of a fish as a sort of masonic password because *ἰχθύς* was an acrostic for *Ἰησοῦς Χριστὸς Θεοῦ Υἱὸς Σωτὴρ*, Jesus Christ the Son of God our Saviour. The symbol may also have been suggested by "I will make you fishers of men," whereby souls redeemed became fish "drawn out of the waters of sin," in the phrase of Clement of Alexandria, a Father of the Church of the second century A.D. who recommended to Christians the use of the fish for designs, seals and the like. The verse that gives the clue to the allegory at the same time as it gives a rather odd twist to the story is :

"Then he pulled off his morning gown and laid it on the ground
'Twas then she spied three chains of gold all round his neck was
bound,"

or "Then he unbraced his morning gown
And gently laid it down,
When she beheld three chains of gold
Went trinkling three times round."

or "Then he pulled off his morning gown
And threw it over the sea,
And there she spied three robes of gold
All hanging down his knee."

This revealed that he was no ordinary fisherman and called for her sudden access of humility towards one who would otherwise be below her in station. The three chains or robes of gold are emblem of wisdom, vestures of light, and are common in Gnostic literature along with the river, the royal fisher, the recognition and adoration by the newly illuminated soul, and above all the mystical union of the Bride and Bridegroom in the House of the Father, a piece of imagery that has survived to this day in the Church of England marriage service. This single song, then, whatever the date and provenance of its tunes, which show considerable resemblances to each other, contains historical material that goes back nearly two thousand years and shows the international character of a symbolism found thus deeply embedded in an English folk-song.

There are a number of English love-songs which show a parallel symbolism whereby the flowers of the English countryside are used to express the various kinds of love, notably "The Seeds of Love" in its many variants and its cousin "The Sprig of Thyme."

Ex. 41

THE SEEDS OF LOVE (SOMERSET)

I sowed the seed of love, I sowed them in the
Spring, I gathered up in the morning as soon as while
small birds did sweet-ly sing, While small birds did sweet-ly sing

My garden is well planted
With flowers everywhere,
But I had not the liberty to choose for myself
Of the flowers that I loved dear.

- 3 My gardener he stood by,
I asked him to choose for me ;
He chose me the violet, the lily and the pink,
But these I refused all three.
- 4 The violet I did not like
Because it fades so soon.
The lily and the pink I did overthink,
And I vowed I'd stay till June.
- 5 For in June there's a red rosebud,
And that's the flower for me,
So I pulled and I plucked at the red rosebud
Till I gain-ed the willow tree.
- 6 For the willow tree will twist
And the willow tree will twine,
I wish I was in a young man's arms
That once had this heart of mine.
- 11 Come all you false young men
That leave me here to complain,
For the grass that now is trodden under foot
In time it will rise again,

Ex. 42

THE SPRIG OF THYME

'Twas ear - ly in the Spring - time of the year When the
sun - did be - gin - to - shine. Oh - I had three bran - ches all
for to choose but one, And the first I chose was thyme, The
first I chose was thyme.

Thyme, thyme, it is a precious thing ;
It's a root that the sun shines on ;
And Time it will bring everything unto an end ;
And so our time goes on. (*bis*).

And, while that I had thyme all for my own
It did flourish by night and day,
Till who came along but my jolly sailor boy,
And stole my thyme away. (*bis*).

And now my thyme is perished for me
And I never shall plant it more,
Since into the place where my thyme did use to spring
Is grown a running rue. (*bis*).

Rue, rue it is a running root
And it runs all too fast for me.
I'll dig up the bed where thyme of old was laid
And plant there a brave oak tree. (*bis*).

Stand up, oh stand up my jolly oak !
Stand you up, for you shall not die ;
For I'll be so true to the one I love so dear,
As the stars shine bright in the sky
The stars shine bright in the sky.

In these two songs the violet is transitory, the rose stands for constancy, and thyme on which there is a pun with Time is a woman's heart, perhaps even virginity.† All three appear together in : "The Loyal Lover."

† There is evidence for this in : (*Songs of the West* No. 7)
In my garden grew plenty of Thyme
It would flourish by night and by day
O'er the wall came a lad, he took all that I had,
And stole my thyme away.

Ex. 43

THE LOYAL LOVER

I'll weave my love a gar-land, It shall be dressed so
fine I'll set it round with ro-ses, With li-lies, pinks and...
thyme, And I'll present it to my love When he comes back from
sea, For I love my love, And I love my love, Be-
cause my love loves me

In "The Seeds of Love" the lily and the pink I then did overthink,
which means "pass over" or "reject" and not "think over."
The symbolism does not tell us why lily and pink were rejected,
except that the red rose bud of June was preferred. In some
versions however all three are rejected :

My gardener stood by me
I asked him to choose for me ;
There's the lily, pink and red rose bud,
I refused these flowers all three.

In June the red rose bud
And that's no flower for me.
The red rose bud I will pluck up
And plant a jolly oak tree.

or With June is the red rose in bud
But that was no flower for me
I plucked the bud and it pricked me to blood
And I gazed on the willow tree.

It did not fail to be observed that the rose had a thorn, and the sight of the willow tree brings in the note of desertion, for the willow is the constant symbol of unhappy love, its supreme musical expression being Desdemona's aria "Salce" in Verdi's *Otello*. The lily may have been too much the symbol of chastity, though that alone could account for the rejection of the seductively smelling narcissus. The symbolism of flowers is indeed a wide subject and when it crops up in music it distils a double fragrance. Ophelia's songs and garlands (*Hamlet*, Act IV Sc. 5) are full of it—rosemary for remembrance, pansies for thoughts, rue and so on. A last instance conjures up a triple enchantment. The Dutch carol "King Jesus hath a garden" (from Bruges 1609, see *Cowley Carol Book* No. 67), where in the garden are heard all manner of instruments, and where:

The lily white in blossom there is Chastity,
The violet, with sweet perfume, Humility,
The bonny damask rose is known as Patience,
The blythe and thrifty marigold Obedience.

The allegory is the poet's, but it is founded on an older symbolism of flowers, and symbolism is a way of thinking about things that is the best clue we have to the nature of artistic creation.

Before we pass on to another plant symbol, to a more vigorous allegory, where an elaborate story of ballad formation is charged with fertility magic, "John Barleycorn," and on from him to another folk-song figure, the Wren that is made king, made divine and then killed that his worshippers may receive some portion of the divine potency, we can force anthropology to contribute to the psychology of artistic creation. For this symbolising propensity of the mind is none other than imagination, the essential aesthetic activity of the mind.

Imagination means the power to manipulate images. What is an image? We all of us crystallize impressions of the outside world which we take in through our senses. When we hold fast in recollection the sensuous experiences so gathered and crystallized we have an image. Now an image may act as a symbol. What is a symbol? A symbol is an image used to embody an idea. The Union Jack and the National Anthem are symbols, because they are images derived from sight and sound of patterns which have some, but not very great, aesthetic value as patterns. Being patterns they are easily apprehended and firmly grasped, but attached to them are all the complex emotions of devotion to our country. They are there-

fore the symbols of patriotism. They became symbols because their meaning was enriched by the imaginative power of the mind to perceive latent resemblances and relationships. The flag was invested with moral attributions derived from its bold colours, its power to ride out the storm, its lofty position and the anthem from its John Bullishness—not for nothing does it derive from a Galliard of the Elizabethan John Bull—from its squat prognathous melodic form, its confident rhythm and diatonic harmony. This seeing of resemblances is at the bottom of all metaphor and simile. We all use metaphors and we use them not merely to adorn our speech but to enrich its meaning by the comparison implied in the metaphor. Thus I used the word “crystallize” just now, a metaphor from chemistry, which is richer in meaning than saying “embody our impressions,” because a crystal besides being a concentrated deposit is also clear and shapely. Hence it is not only more poetical but more significant to use the metaphor of crystallization. Now this seeing of resemblances is of the essence of poetry (*ποίησις*, artistic creation)—Aristotle defined a poet as a master of metaphor. The mind seizes on an image and makes it the starting point for a work of art; the image may become a symbol with a wealth of associated ideas and strong emotions, all of them the raw material of art. These songs are works of art derived thus directly from the imagery with which the minds of simple but poetical people are full.

Now we can advance from symbol to allegory and magic. There are versions innumerable of “John Barleycorn,” some that have come by the broadside and literary traditions as well as by the oral, for the ballad has a history as well as a pre-history. The version selected for quotation was sung by Shepherd Hayden at Bampton, Oxon, to Cecil Sharp in 1909. It is a fine Dorian tune with the sixth degree still capable of inflexion, and its five verses give in short compass a sufficient indication of the agricultural processes involved in the incantation.

Ex. 44

JOHN BARLEYCORN

There was three men and three times for us in the
sol - emn vow John Bar - ley - corn was dead
plough'd, they sow'd, they harrow'd him in, Thresh'd it, and - on his
head, And these three men made a sol - emn vow John
Bar - ley - corn was dead

2. Then they let him die for a very long time
Till the rain from heaven did fall
And little Sir John sprang up his head
And soon amazed them all.
They let him stand till midsummer
Till he grewed both pale and wan
And little Sir John grewed with a long beard,
And so became a man.
3. They hired men with the scythes so sharp, to cut him off at
knee
And the malter served him worse than that, he served him
most barbarously,

They hired men with the sharp pitchforks, who pricked him
to the heart
And the leader he served him worse than that, for he bound
him to the cart.

4. They wheeled him round and round the field, till they came
unto a barn
And there they made a solemn vow of poor John Barleycorn
They hired men with the crabtree sticks, to cut him skin from
bone
And the malter he served him worse than that
For he ground him between two stones
5. Here's little Sir John in a nut-brown glass and brandy in a
glass
And little Sir John in a nut-brown glass proved the strongest
man at last.
And the huntsman he can't hunt the fox nor so loudly blow
his horn
And the tinker he can't mend kettles or pots without a little
of Barleycorn.

A better-known version, with a nonsense refrain, is the Devonshire song first printed in *Songs of the West* and transferred to *English Folk Songs for Schools* under the joint editorship of Sharp and Baring-Gould.

The idea of the corn spirit must be universal. Frazer in *The Golden Bough* chronicles scores of instances of devices used by primitive peoples to ensure the survival of the corn-spirit and the various magics, including human sacrifice, to promote the fertility of the soil and good crops next year. "The same identification," he writes, i.e. of the corn spirit with his human representative "is implied in the savage custom of killing the representative of the corn-spirit with hoes or spades or by grinding him between stones, and in the European custom of pretending to kill him with the scythe or flail."

What we have in "John Barleycorn" then is a magical rehearsal of the process of corn growing and the personification of the corn spirit, even to turning it into an English knight or gentleman. This is the feature that projects most prominently from the first recorded version of the ballad, which as a matter of literary history belongs to the reign of James I. There is a black-letter broadside in the Pepys Collection of Ballads which goes to the still older tune "Lull

me beyond thee," or to the similar and appropriately named tune "Stingo" or "The Oil of Barley" found in *The Dancing Master*. (Stingo=strong brew).

Ex. 45



Ex. 46



The ballad begins :

As I went through the North Countrie
I heard a merry greeting
A pleasant toy and full of joy—
Two noblemen were meeting.

The two noblemen were Sir John Barley-Corne and Sir Thomas Good-Ale, and the ballad is described as :

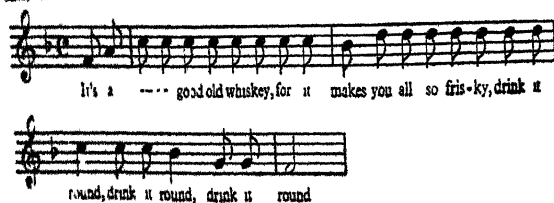
"A pleasant new ballad to sing both even and morn
Of the bloody murder of Sir John Barley-Corn."

Chappell quotes as evidence that the ballad-hero goes back to Saxon times—of course he does and how much further!—a translation of

an Anglo-Saxon verse in the Exeter manuscript, which, because it is one more instance of the use of a riddle to convey poetic meaning, shall be repeated here :

"A part of the earth is prepared beautifully with the hardest and with the sharpest and with the grimmest of the productions of man, cut . . . and turned and dried, bound and twisted, bleached and awakened, ornamented and poured out, carried afar to the doors of people ; it is joy in the inside of living creatures, it knocks and slights those, of whom before, while alive, it for long obeys the will and expostulateth not ; and then after death it taketh upon it to judge, to talk variously. It is greatly to seek of the wisest of men what this creature is." What is he but the corn spirit, the growth process described once more in a plainly readable parable ? The idea of the potent drink, which so neatly completes the life cycle is also a piece of magic, for one drinks Bacchus himself to get the god inside one and with the god his power. The nonsense refrain found in some versions may also be a bit of magic, though weaker withal, since it is in the nature of an incantation. A refrain I once heard belonged to a corruption of " John Barleycorn." This was sung by a troupe of mummers on a Boxing Night about 1905 at Wolvercote near Oxford

Ex. 47

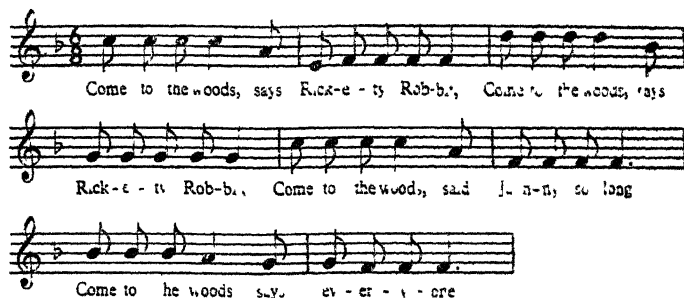


in which nothing is left but the name and a drinking refrain. The mummers sang it in my grandfather's house and the whole family of prim teetotalers took it up and sang it with immense gusto—so does the ancient magic work !

A favourite method of anthropological as it is of archaeological research, is the stratigraphical, by which discoveries at different layers may be dated in order of antiquity or evolution. The stratigraphical method applied to the nursery song "The Cutty Wren" uncovers layers of lore. The first version here given was collected by Miss May Morris from her nurse and contributed to the

Folk Song Journal Vol. V. It is a primitive tune in which a single phrase is repeated four times at different pitches, represented by the formula, $a \ a^2 \ a \ a_2$.

Ex. 48



Come to the woods, says Rickety Robbit,
Come to the woods, says Rickety Robbit,
Come to the woods said Johnny so long,
Come to the woods, says every one.

What'n do there ? says etc.

Shoot Jenny Wren, says etc.

What'n kill 'un with ? says etc.

Powder and shot says etc.

How shall we go ? says etc.

In a cart with six horses says etc.

What'n do with the offal ? says etc.

Give to the poor of the parish says etc.

The plot is as simple as the tune. There are only two characters Rickety Robbit and Jonathan Long, both of them essentially nursery people. There is a resemblance to the ballad of the death of Cock Robin. And the point about the poor of the parish should be observed and kept in mind.

The second version is more elaborate both in tune and in plot. The same initial phrase is used for each of the four phrases at the same pitch, except that the last begins a third higher, but the cadence figure is different every time. The song has also begun to suggest the behaviour of a cumulative song—it seems to want to turn itself into one. The ceremonial killing is more elaborate and the wren is dismembered. The old Oxfordshire shepherd who sang it used to stamp violently at “everyone,” which suggests communal action of ribe or clan.

Ex. 49

We'll go a - shoot-ing, says Rich - ard to Rob - in,

We'll go a - shoot-ing, says Rob - in to Bob - bin,

We'll go a - shoot-ing, says Jon - a - than Young,

We'll go a - shoot-ing says ev - er - y - one

We'll go a-shooting says Richard to Robin
 We'll go a-shooting says Robin to Bobbin,
 We'll go a-shooting says Jonathan Young
 We'll go a-shooting says, every one.

What shall us shoot ? says etc.

I see a wren, says etc.

We'll all shoot together, says etc.

She's down ! She's down ! says etc.

How shall us get her home ? says etc.

We'll borrow Feyther's cart says etc.

We must hire a waggon, says, etc.

How shall us get her in ? says etc.

We must hire some ropes, says etc.

We'll all heave together, says etc.

How shall us cook her ? says etc.

We'll buy borrow a furnace, says etc.

We must hire a cook, says etc.

What shall us gie her ? says etc.

We must gie her the feathers, says etc.

That won't be enough, says etc.

We must gie her the bones, says etc.

The feathers will choke her, says etc.

The feathers *have* choked her, says etc.

So the poor cook is dead, says etc.

What shall us do with the braath ? says etc.

Gie't to the poor of the parish, says etc.

Other tunes in six-eight time of lively character have been collected in Wales and the Isle of Man, and they belong to the custom of Hunting the Wren, which was observed as late as 1896 on St. Stephen's Day, December 26th. Frazer, (*The Golden Bough*, p. 536-7) incorporates the account of the Manx celebration in the following general description of the custom :—

“By many European peoples—ancient Greeks and Romans, modern Italians, Spaniards, French and Germans, Dutch, Danes, Swedes, English and Welsh—the wren has been designated the king, the little king, the king of birds, the hedge king and so forth, and has been reckoned among those birds which it is extremely unlucky to

kill. In England it is supposed that if anyone kills a wren or harries its nest he will infallibly break a bone or meet with some dreadful misfortune within the year." (Frazer quotes a number of consequent catastrophes from Scotland, Brittany and elsewhere).

"Notwithstanding such beliefs the custom of annually killing the wren has prevailed widely both in this country and in France. In the Isle of Man down to the eighteenth century the custom was observed at Christmas (The attribution to December 24th or 25th instead of 26th is probably a mistake on the part of the recorder, Waldron (c. 1726), from whom Frazer took his account). On December 24th towards evening all the servants got a holiday; they did not go to bed at night but rambled about till the bells rang in all the churches at midnight. When prayers were over, they went to hunt the wren, and having found one of these little birds they killed it and fastened it to the top of a long pole with its wings extended. Thus they carried it in procession to every house, chanting the following rhyme :

We hunted the wren for Robin the Bobbin
 We hunted the wren for Jack of the Can (? land)
 We hunted the wren for Robin the Bobbin
 We hunted the wren for everyone.

When they had gone from house to house and collected all the money they could they laid the wren on a bier and carried it in procession to the parish churchyard, where they made a grave and buried it 'with the utmost solemnity, singing dirges over her in the Manx language which they call her knell; after which Christmas begins.' The burial over the company, outside the churchyard formed a circle and danced to music."[†]

Frazer gives other instances from Ireland and the South of France. The significance is indeed pretty clear—communion with deity. Frazer sums it up : "The worshipful animal is killed with special solemnity once a year; and before or immediately after death he is promenaded from door to door, that each of his worshippers may receive a portion of the divine virtues that are supposed to emanate from the dead or dying God." Thus power is set free for human aid by killing the repository of power, the god or king, and eternally renewing the god or king so that he grows not old or feeble—the theme of *The Golden Bough* itself.

[†] The temporary absence of servants is an ancient custom, of which vestiges are found in the Roman Saturnalia and the English Lord of Misrule.

The song has been rationalised by references to political,† social and even economic history‡—the last a Marxian interpretation. Layer upon layer of lore can indeed be uncovered once the surface of the song is scratched: music, folk-custom, anthropology, psychology and history are not a bad haul from one nursery rhyme.

4. CONCLUSION

IN these three enquiries, neither of them pursued very far, music has been the subject of anthropological field work, it has raised a questioning voice in the disputations of ethnology, and it has provided the material for anthropological excavation. Music has led the enquirer into the adjacent fields of history, folk-lore, linguistics, literature and psychology. The methods of anthropology, collection of data, comparison, classification, can be applied to tunes, and folk-song texts can be examined, as it were, stratigraphically. The two studies, anthropology and music, thus fertilize each other. Music, a humane art, abuts on a science, albeit a humanistic science, and the methods of anthropology are capable of opening up the obscurity of some pages of music's long history.

† See *Folk Song Journal*, Vol 17, p. 178-9.

‡ *The Singing Englishman* by A. L. Lloyd.

PHILOSOPHY AND MUSIC

1. BEETHOVEN'S QUESTION : ART AND KNOWLEDGE

BEETHOVEN once made the pronouncement that "Only art and knowledge raise man to the divine, and music is a higher revelation than all wisdom and all philosophy."[†] A good many people might agree that music in its essential nature is a revelation. It presents sudden and complete something which was not in a man's consciousness before. The immediacy of musical experience is a basic characteristic of it, and every enquiry that presses closely the analysis of musical creation, as of finely-pointed musical interpretation, comes quickly to the discovery that, whatever else it is and whatever process of gestation may have gone on before, the creative imagination is a faculty that works by direct and immediate intuition. Immediacy is the mark of musical experience of all sorts, creative, interpretative, critical or merely receptive. But the claim that it is higher than wisdom will be discounted by the fact that Beethoven was a practising musician and not a practising philosopher. That there was some more philosophical element in the music of Beethoven than is to be found in any of his predecessors is generally but not universally admitted: the epithet "transcendental" is accepted as aptly applied to the late quartets, but inasmuch as Beethoven's instrumental music is the chief body of evidence invoked by those musicians who assert the complete independence, self-sufficiency and absoluteness of music it will be necessary to subject it to keen scrutiny for its transcendental as for its philosophical implications. Dr. Ernest Walker is spokesman for this school of thought which stands firm on the ground that music exists for music's sake, that its contacts with words, drama and dancing, which cannot be denied or repudiated, are derogatory to it as a sovereign, autonomous kind of spiritual experience. To so mild a claim that there is some sort of drama being enacted behind the

[†] The sentence occurs in Bettina von Armin's letter to Goethe of May 28th, 1810. It is part of an argument that new creation comes by something more enraptured than wisdom and philosophy.

weaving of the themes of the Fifth Symphony Dr. Walker retorts fiercely that "many musicians would deny it with their last breath." That music can contribute anything to any other branch of philosophy than aesthetics or that there is any philosophical content in specific musical compositions has therefore to be argued. It will not however be denied that music has particularly valuable contributions to make to aesthetics because its medium (sound) is immaterial and its content often indeterminable, unlike the other arts; it does in fact provide a limiting case for any theory of beauty.

Beethoven was not a systematic thinker but he had views on the relations of music to knowledge and wisdom, though he expressed them in somewhat rhapsodical terms. The letter from which the last part of the quotation, that music is a higher revelation than philosophy or wisdom, is taken is full of queer jumbled ideas and metaphors about electrical soil and electrical essence, and Goethe observes that there are contradictions and obscurities in it but says that before what is uttered by one possessed of such a demon an ordinary layman must stand in reverence: "it is immaterial whether he speaks from feeling or knowledge, for here the gods are at work strewing seeds for future discernment and one can only wish that they may proceed undisturbedly to development - - - To think of teaching him would be an insolence even in one with greater insight than mine, since he has the guiding light of his genius which frequently illumines his mind like a stroke of lightning while we sit in darkness and scarcely suspect the direction from which daylight will break upon us." Such a flash of illumination, besides the one already quoted, is "Music verily is the mediator between intellectual and sensuous life"—a pregnant hint that music is a kind of intellectual exercise, a kind of thought. Another is "Music is the one incorporeal entrance into the higher world of knowledge," an equally pregnant hint that music is a form of knowledge. Both of them are propositions that music has a place in philosophy. They occur as flashes in an unsteady argument that new creation comes by something more enraptured than wisdom and philosophy. Beethoven said afterwards that he was in a raptus when he thus delivered himself and Goethe accepted the rapt nature of his revelation. Those statements about music are to be found in Bettina von Arnim's letters to Goethe. Grave doubts are thrown on her veracity, and her book, "Goethe's Correspondence with a Child," is dismissed by Goethe's biographers as pure romance; general discredit is heaped upon her as a Brentano, who had a family reputation for irresponsibility. But what is discredited is

her personal relationship with Goethe. It seems improbable that she could have made up the aesthetic doctrines which she puts into Beethoven's mouth. No doubt she dressed them up into their literary shape, for Beethoven's utterances in words, whether spoken or written, were never coherent, but it would be surprising if the substance of them did not represent Beethoven's thought about the nature of his art.

Goethe at any rate had the psychological penetration to recognise what Beethoven and Bettina were driving at, and it is to investigate what relation music bears to knowledge, wisdom and philosophy that we address our enquiry, fortified by Beethoven's instigatory example and by possession of the clues that the hall-mark of musical experience is its immediacy and that its intellectual aspect is of the nature not of ratiocination but of revelation.

What then have philosophy and music to say to each other? Philosophy, as the master study to all studies, has of course to account for music and assign it a place in the hierarchy of mental pursuits. Plato did that very firmly long ago; the modern systematic philosopher has to answer a number of questions about the nature of music—in particular the difficult question of form and content that is answered more easily in the other arts—what is the content or subject-matter of a piece of music? Philosophy may put music in its place, but can music retaliate and contribute anything to philosophy? Can music philosophise?

One of the tiresome things about philosophy is that before you can begin to philosophise in philosophical terms you have to define them. This is what makes philosophy the perfect training in clear thinking. But people who are pursuing philosophy herself and not a philosophical education are anxious to begin with a minimum of delay the discussion of philosophical issues, like the nature of knowledge or the nature of beauty—will not music incidentally have something to say on both those philosophical topics? But philosophy is a word of wide connotation, whose root meaning is the loving pursuit of all skill, all knowledge and all wisdom—a large field. The skill of music for instance on such a definition is part of philosophy, as the Greeks first understood the word, which is of their coining. But a skilful pianist is by no means a philosopher. All science, which is knowledge, was once a branch of philosophy and there are still university professors, of science not philosophy, who occupy chairs of Natural Philosophy. But philosophy began to shed its skills and sciences long ago. Specialists invaded her territories and annexed large

portions of them. Some she has only recently lost, psychology for instance. The name for skill nowadays is not philosophy but art and craft. Mathematics, which very early established a special place, a certain autonomy, within philosophy because it provided the perfect example of deductive *a priori* thinking, has remained in close alliance with philosophy. Mathematicians from Descartes to Bertrand Russell, Eddington, Whitehead and Einstein, find their mathematical thinking sooner or later becoming metaphysical thinking. To ask a question about pure quantity, it would seem, leads one along a path at the other end of which are questions about pure being. But even so mathematics is not philosophy although it is deductive thinking—its subject-matter has achieved independence.

The arts and skills have gone; the fact-finding experimental sciences have gone; the solitary deductive science of mathematics has detached itself; what has philosophy left?

It retains three powers and five sorts of subject-matter. The method of philosophy has always been strict ratiocination, the use of the logical powers of the mind which employ words for their counters (as distinct from the logical powers of the mathematician's mind which employ symbols). It brings reason to bear on all its subject-matter. But speculation and wisdom are other weapons in the philosophical armoury. Speculation is for the philosopher what faith is for the religious man, the only instrument he has for probing the impenetrable mystery of life on this planet. It is a somewhat flighty instrument of thought though it handles the deepest subjects, and philosophers keep it tethered to reason rather than imagination. Wisdom, on the other hand, is not so much a method of thought as a product of much thinking and of much doing and of much knowing. The wise man is a philosopher in the oldest sense, who by the exercise of skill, the acquisition of knowledge, the exercise of thought, has reached a kind of super-knowledge which enables him to philosophise without narrowness of vision, to perceive the limits alike of knowledge and reason, to be sure-footed in speculation and not entangled in the subtleties of his own thought. The wise man is thus often an artist in life, which is more than being a philosopher. Not all philosophers are wise, but the wise are philosophical, and the subject-matter of philosophy is best handled by wise men. For philosophy's subject-matter, now that it has lost the exact sciences, consists of the ultimate and unanswerable questions—what is good, what is right, what is true, what is beautiful, what is real.

These five questions are debated in five departments of philosophy—ethic, politic, logic, aesthetic, metaphysic. Other questions arise out of them ; for example the Kantian trio of God, freedom and immortality, but it is to these five studies that music presents itself for discussion. Politics, though related to ethics, can be relegated to a separate chapter dealing with music and society. Ethics and art have from time to time loudly proclaimed their independence of each other, hostility even ; music and morals were the source of much puzzled and often rather naïve discussion by earnest Victorians ; it has been left to our own day to discuss the same issue in an even cruder form—art and propaganda. The independence of music, its insistence on its own absolute standards, its uselessness from a biological or strictly economic point of view, music for music's sake, are different statements of a single attitude towards the art which finds many supporters among the best musical minds. But it is not the basic assumption of a book whose main purpose is to explore the connexions of music with other of the mind's activities and with all the experiences of life. Music and morals certainly offer a case for investigation.

Logic and music have at first sight no connexion, for the processes of musical thought are not ratiocinatory ; you cannot in fact argue in music. There are certainly analogies to logic in music, a harmonic progression for instance may suggest faulty logic, or at any rate bad grammar. Analogy is a dangerous but not a forbidden or wholly unsound way of thinking and logic may yield a little light on music, but we must not expect much. We may however expect to find that if the logician has no use for music, music may have something to say to theories of knowledge, and theories of knowledge are the bridge between logic and metaphysics. For music is both a kind of knowledge and a way of thinking.

There remains aesthetics which is directly concerned with all art and with the nature of beauty to which Music has some particularly valuable contributions to make.

2. ETHICS

MUSIC and morals is an old conjunction of ideas—at least as old as Plato. Yet, as in the similar affinity between music and mathematics the more one presses for clarity in the definition of their relations the more vague and insecure does the connexion become. All

music is physically based on simple mathematics, the art of music repudiates the harmonic series itself at the eleventh partial, and harmony cannot advance on mathematical principles. Temperament and vibrato are both matters of artistic liberty. One can go no further than to trace the analogy between legal and algebraic logic, and to conclude a decision on logic. As with mathematics so with music there is to be a common foundation: yet similarly elusive is the relation of music and morals. Morality is based on man's spiritual nature and music is a spiritual experience. Since both are spiritual then there must be some connexion between them. But when attempts are made to trace it, it is found that each claims an exclusive independence.

The words "good" and "bad" at first sight appear to be the main bridge between music and ethics. It is true that when an action is approved or condemned as good or bad it is a moral judgment and when a work of art is judged in the same terms it is an aesthetic judgment, and the two must not be confused. But the usages of language must never be altogether dismissed by logicians though they justifiably insist on these distinctions; it is not mere confusion of terms and looseness of thought that causes two different judgments of value to be expressed in the same terms, "good" and "bad." The Greeks observed the distinction and then blurred it by their compound epithet *καλοκάγαθος*. Art and morals are in fact the chief fields for the exercise of judgments of value; the idea of the good runs through music and conduct alike. It is not therefore an unfounded presumption to postulate some connexion between them.

The age-long association with religion is another warrant for seeking to determine what the relationship is. Religion is the spiritual activity of man by which he seeks to ascertain his place in the universe (a metaphysical issue this, approached in philosophy by a different method), and to order his behaviour in accordance with the laws so discovered to be operative in that universe; conduct is a corollary of belief at all levels of religious development. In some religions it is ritual rather than moral acts that show the most direct connexion with belief, but the prohibitive side of morals usually has a religious as well as a purely social sanction. The emotion which is the third element in the complete religious experience and translates belief into action by providing the dynamic energy, is awe, and awe is responsible for worship. Music has at all times been an adjunct of worship, and in Western Europe has grown up in the Church as

religion's handmaid. It would seem therefore that the affinity between music and morals has a fairly substantial basis in religion. Music certainly has great powers of expressing aspiration, and aspiration is religion's most usual characteristic, embodying, as it does, knowledge of, or belief in, God, an emotional response to Him, and good behaviour as an immediate consequence in action of these intellectual and affective states.

But music got tired of its "handmaid" status after a few centuries and launched out into the world on its own, though still willing as a part-time occupation to render service to the Church. Further a distinction drawn at various times between sacred and secular music has broken down. A symphony is nowadays regarded as sufficiently edifying to be played in a cathedral without seeming inappropriate. Nor do music and propaganda for social ends take kindly to each other; when a musician is asked to write some opera or cantata that shall embody ideas of good and evil, right and wrong on a social or political issue to Right or Left and so lend them emotional force, music usually proves recalcitrant to propagandist aims and remains merely music—quite neutral: it has its own canons and ideals, and in any case the "digestion" by music of such extraneous ideas of morals or politics is usually inadequate for the purpose of propaganda, which cannot spare the time for recollection in tranquillity. Christian hymns are among the worst music in the world, and music with a consciously propagandist aim, music tied to political doggerel, is usually dull beyond belief. Then again if music made people good, as it ought to considering its spiritual nature, musicians should be among the noblest of men. But they are not noticeably so. A trans-continental sleeping-car attendant once said to me: "So you are a musician? Then your heart is pure." Maybe, but I see little evidence in musical biography that music leads to good behaviour or makes saints of its practitioners. Our Victorian grandfathers, who thought a lot about moral problems, were always puzzled by artists who played and sang like angels but were foul in speech, loose in living and unpleasant as persons. Wagner, who enriched the world, was always robbing his neighbours of their wives as well as their cash. Even Beethoven, who walked with God, cheated his publishers. We have given the problem up as one of morals and prefer to treat it as one of psychology.

But, however, covers a wider ground than morals which are concerned with conduct. Moral behaviour is no doubt a test, the

critical test of character, and moral problems provide the chief points for discussion of those wider questions—what is justice, what is freedom, what is obligation, what is the good? Music has no direct answers to give to any of these questions, more than it can answer the questions of discipline and training, because it is not discursive but intuitive in its nature, working though some of these questions occurred Beethoven's mind and form the core of some of his music. Beethoven did use ethical subject-matter in a wide range of his second period work. The connexion must be sought at the root: both morality as an expression of the good and music as an expression of the beautiful are part of man's spiritual nature. A man's spiritual nature is in summarised form his character. We sometimes speak of his "moral character" in order to limit the notion of character, while the word "personality" is used to express a wider area of his natural endowment. But a man's character is what he makes of his natural endowment and its slightly ethical tinge is a help to us in our present enquiry. The problem now is to find out the connexion of music with character. How far does a composer's character come out in his music? How far does an executant's character come out in his interpretations? How far can music depict character—can it for instance portray evil? How far can music train character, as Plato seriously maintained?

Music in Plato's world was a very simple art but also a very subtle: it was purely monodic and therefore incapable of the massive effects of modern harmonic music, but ears attuned to melodic minutiae could find more significance in single line melody than can our ears debauched by centuries of harmony. If it was subtle it was also meaningful, for otherwise Plato could not have made the claims for it that he does, nor proposed the drastic prohibitions, which would ban the use of certain modes and expel instrument-makers from his ideal city. Socrates, while disclaiming technical knowledge, asks what modes are conducive to sadness, to conviviality, to bravery. He is told that the mixolydian and hyperlydian are mournful, that the Lydian is soft and convivial, the Dorian and Phrygian are the modes respectively for the warrior and for the moral man who is not under orders. This sounds very arbitrary to us, who go no further than saying that our minor mode is more passionate than the major. Plato as a matter of fact is not thinking of music without words, and it is the nature of the words which determines his view of the right music in which to nourish

his guardians. But he takes for granted, in the absence of close technical knowledge, that the purely musical characteristics form a counterpart to the poetical ; the Lydian is suited to relaxation and conviviality by some inherent quality, and a convivial poem would not sound right in the Dorian mode, which by the same inherent appropriateness belongs to war songs. Modern scholars, classical and musical, regard all this as fanciful and, while allowing that there may be something in the idea, since the psychological processes of education are so deeply hid, cannot think otherwise than that Plato was exaggerating its power and scope. The British Public Schools, in their great days of the nineteenth century when they were mainly concerned with producing a race of administrators on the basis of a classical education, would have none of it and treated music as an outcast in the field of education. All this is changed now, and the educational possibilities of music have so far been recognised as to use it as a training in corporate effort in fields other than physical movement, as in fact a health-giving influence upon the unfolding mind of adolescence as well as an emotional outlet and a training in sensibility. There is in fact a considerable approximation in modern educational theory to the Platonic idea. For at bottom Plato's musical criticism, for all its specific recommendations and prohibitions, does not amount to much more than an advocacy of simplicity—indeed he talks some nonsense about banning chromatic flutes because of their “many notes.” What Plato says of rhythm is much more to the point. Here he had got hold of a very valuable idea, which is confirmed by experience, that rhythm has a profound influence upon the deeper levels of the mind. His words in the *Republic* are :

“Rhythm and tone (*ᾠρομία* — tonal organisation of music in scales) enter right into the inner recesses of the soul (the sub-conscious mind) and lay powerful hands upon it, imparting grace and making the man graceful who is rightly trained and disgraceful the man who is not.” (The point about right training is introduced consequently upon the whole of the educational argument that is being pursued in the context).

and in the *Protagoras* :

“They (?) the teachers) constrain rhythm and euphony to dwell in the souls of the young in order that they may be made more civilised, and in becoming more imbued with rhythm may be made more servicable to the community in word and deed. For the

whole life of man needs a good rhythm and a spirit of harmonious accommodation.

Dance is a word that has had to be requisitioned from the Greek lexicon for the psychological effect of rhythm. *Choreia*, the term has been borrowed for the sort of rhythmic activity that produces a state of elation or "Dancing," which can be used to induce a certain state of mind, ranging from quasi-hypnotic torpor to frenzied activity. It is an outlet for the instincts of gregariousness and sex, but also, if of a "eurythmic" kind bring about a tranquillisation of a fractious mind and by releasing hidden springs of energy exorcise the cancer, making him, as Plato says, more harmonious (*εὐχρῆμος*) and more social (*χορῶσιμος*). Dancing therefore is used in the early stages of education, as it is also therapeutically with the mentally disabled, as the first and most obvious measure to take to induce some sort of order in the scatter-brained, the unsocial and the uncoordinated. There is not much evidence to show what dancing could do at the higher levels of education where normally sport takes its place. Rowing is such a eurythmic exercise. It cannot be claimed, however, that rowing and dancing can make good citizens against adverse forces, any more than that an international folk-dance festival, which certainly releases immense good will (as I myself witnessed in 1935 in London) among the participants can restrain the animosities of the politicians who conduct their other international relations. But no educationist claims that any specific subject in the curriculum, any specific leisure pursuit, can be guaranteed to produce a specific desideratum in the mind of the student. All that is claimed is that dancing or music has a salutary tendency in the direction of co-ordinated social behaviour. This is the Platonic view of the value of music (which consists of *ῥυθμός* and *ἁρμονία*) in education, and by implication in moral relationship and social life. And this view has found an increasing measure of support among modern educationists even if they make less explicit claims for it than Plato did.

Jacques Dalcroze in modern times has attempted to revive and adapt to modern conditions (i.e. by using modern measured and harmonic music as opposed to Greek monody) the Platonic ideal and may be said to have established a presumption in favour of its soundness. More striking perhaps has been the experience of Commander C. B. Fry with the boys on his training ship *Mercury*. His testimony to the value of music in education is not to its moral

value in the ordinary sense but to its effect on the intelligence. In speaking of the relation of music and morals 'moral' has usually to be interpreted as excellence of the whole personality—the good man has not only the moral virtues but an alert mind, a quick sympathy, personal charm and all those things that constitute all-round human excellence. Fry's experience as a schoolmaster during more than thirty years is that music with its *ῥυθμός* and *ἁρμονία* (which I prefer to translate rather as euphony than as harmony, since Greek music was non-harmonic) is of the utmost educational value—"in this sense that you can see dull boys growing intelligent under its influence." His autobiography records "I have noted any number of cases where the moment a boy began to improve in music, he also began to improve in all other subjects, especially in mathematics. I have also noticed that in the examinations at the end of the year more prizes in all subjects go to the best musicians in the school band than in any other direction . . . The most valuable educational instrument in the *Mercury* is music and what we call gunnery, which amounts to rifle and field exercises." So he vindicates Plato's claim that *μουσική* καὶ *γυμναστική* (music and gymnastic) are the best education for responsible citizens.

It will not do so to fall in love with this argument as to claim in defiance of all experience that composers are therefore saints and executants heroes. Musicians do take to drink and some of them like Moussorgsky, come to a bad end as a result of it. Musicians are lax about money-morality and either lose their jobs like Dowland or corruptly make a fortune like Lully. Musicians of the utmost artistic integrity, like Wagner, behave like cads in the matter of women and money, and are ruthless in self-assertion and equivocation of the truth. Musicians are just as much products (or victims) of their heredity as other men are, and so we find Beethoven incapable of normal social intercourse and Mahler the architect of many of his own troubles. Musicians are just as much moulded by their environment as other men so that Brahms developed a queer sex life as the result of his boyhood experience in Hamburg brothel where he played the piano, and Mozart reacted against his father's excessive (though probably justified) solicitude just as any more rebellious character would have done. Musicians are just as much psychological tangles as other men, so that Puccini combine laziness, mental and physical, with bursts of intense activity, sympathy with a streak of sadism that brought cruelty into all his operas and showed some other contradictions, and Tchaikovsky

sexual inversion coloured his music, or was it an inevitable concomitant. And so the tale could proceed indefinitely.

What might perhaps be asked at this stage of inquiry is the opposite question: how far do the man's moral character affect their music? In the first rank a good artist. Byrd's music is extraordinarily like his man. He was grave with a vein of tenderness, stubborn and tenacious of what he thought right (e.g. his religious views) and of his rights (in his many legal disputes); he was revered by his contemporaries as appears in the astonishing unanimity of their comment, which is in the vein of "never without reverence to be named." A complete portrait formed itself in my mind when I went through all his music for the purpose of writing a biography. The music is charged with high seriousness, a vein of tenderness runs through it, a certain wit is also to be found in it. My impression, formed without conscious effort or any brain cudgelling for similarities of character and artistic endowment, was that he was an Englishman of the type that has produced Quakerism. The music is all of a piece with the man's character. His moral nature is an element in his artistic greatness. Purcell on the other hand, no less gifted in technical ability, and with as clear an individuality though with a less original mind has suffered in reputation by reason of a certain easy-going complacency in his make-up. He fell in with what has well been called the "thistledown mentality" of his time and was too accommodating to its flippant taste, though this is a deduction from his musical behaviour rather than independent evidence of his personal character, on which only a few recorded incidents throw any light whatever. Of these there is the amusing story of his rebuke to a fussy teacher of a boy singer. "O let him alone" said Purcell, which argues tolerance, and there is the story of his trouble with the Abbey authorities over the money he received for places in the organ loft at the coronation of William and Mary, which indicates a certain laxity, not necessarily of morals but of behaviour. Both are consistent with a lovable but not very strong character. The evidence is too slender to go further than saying that much of his output is wasted, as far as posterity is concerned, because in spite of his genius and his achievements he expended his talent upon ephemeral and sometimes unworthy texts rather than bother about finding something more worthy of himself. A similar strain is discernible in Mozart, though Mozart was much more aware of life's serious side and an artist's more serious duties (although this has to be said in default of comparable evidence of what

Purcell thought about politics, religion and his fellow men). Mozart made a mess of his career. He seems uniformly to have failed to make a sufficiently favourably impression to win the confidence of those who recognised his genius. Leopold Mozart has come in for much opprobrium for his governnessy solicitude for his son, but the evidence of Wolfgang's life goes to show that the father had made a fairly shrewd estimate of his son's rather shallow character. Mozart depicted in Tamino the man he knew he ought to be and in Papageno the typical Austrian whom in personal character he more nearly resembled. There was a strong vein of seriousness in Mozart as there is in his finest music. There is also a good deal that is superficial in the man and in much of his music. Mozart is the supreme instance of the god-given genius who might have achieved even more than he did (which is saying a lot) if he had been less precocious, less prolific, had lived longer, had married a different woman. In these days when any note he wrote is regarded as sacred this may seem like blasphemy and a gratuitous jettisoning of the connexion I am trying to establish between music and character. But it is undeniable that his life was a tragedy, in which the tragic element is precisely that it was unnecessary. Great composers must needs be prolific but some measure of concentration, which it was not in their character to provide, would have profited both Purcell and Mozart.

No marks are given for industry to great composers. They are by nature productive and only Rossini can be castigated for idleness. Bach's industry therefore though it wins admiration does not separate him from his fellows. His music is, one feels intuitively, a reflection of his religious faith, but as far as character goes the only traits of which we have certain knowledge are the irritability natural to anyone who has to live among a crowd of children in home or boarding school, (Bach did both), an extreme tenacity equal to Byrd's, amounting to pugnacity in causes in which on the facts recorded he was usually unreasonable or in the wrong, a certain simplicity and a certain dignity and a certain integrity. It is this last quality that pervades the man, the artist and the music itself. It accounts even for some of his limitations, such as the lack of variety and subtlety of his cheerful music. His quick movements are all extrovert bustle, and while in the reflective movements every kind of sad emotion is to be found faithfully portrayed happiness is mostly of one rather hearty kind. True it is that a more serene contentment creeps into such an aria as the now well-known "Sheep may safely graze," which comes from an occasional cantata reflecting the happy

atmosphere of a birthday festivity, in which the very fragrance of the flowers is to be perceived. The total picture is that Bach's music is a true reflection of a man who had a vision and a purpose, who brought together with the determination to follow both the way of life.

Verdi was a man of very similar character—serious, earnest, and not much sense of fun—who after a long process of refinement, brought alien elements in his art achieved something of the nobility, solidity and nobility to that which shone in his character.

Nobility perhaps is the moral quality rather than goodness of heart or rectitude of conduct, that animates a man's art. The lack of it is revealing too. Strauss for all his great achievement, which is astonishing for its wizardry, its super-competence and its brilliance, writes music that rings hollow for lack of nobility. His gross materialism infects everything; when it is a material subject under discussion well and good, he can extract what there is of beauty from any worldly situation or emotion; but when there are loftier matters afoot there is something unpleasant in his touch upon them so that even his songs are tarnished by it. When he deals with what is unpleasant, as in his studies of psychopathological subjects in opera and tone-poem, he is remarkably adept in portraying something that is congenial. And when he is consciously noble as in the *Verkärung* part of *Tod und Verklärung* he achieves a banality that indicates spiritual bankruptcy.

It is impossible to analyse every composer on these lines, and it would still be impossible, if one did achieve that impossible task, to make a water-tight case for the thesis that one element in musical greatness is moral nobility. And there are even cases, Parry's for instance, in which moral ideals killed music. But if it is true, as Koechlin said of Fauré, "that it is always the man we find in the artist," as was certainly true of Fauré, we shall expect to find that character does provide an element in a man's music. This is not to say that it usurps the place of imagination, or of skill, or of nervous sensibility, nor of the incalculable element of genius. But it is to find confirmation of the belief that man's moral and artistic natures are interpenetrable, that there is in fact a connexion between music and morals not only in education and in appreciation but in the actual composition of music.

The further question remains: can moral issues provide the subject-matter of music? Where words or drama are involved, in which specific issues can be posed, discussed and answered, the question takes on another form: has the composer in his music

understood the issue? Is he sincere in his treatment of the text, i.e. has he made the issue or the affirmation of faith his own? There must be many settings of the Creed by unbelievers, some of which are patently hollow, some of which are the reflection of an assent to the general drift of the doctrine rather than a specific embracing of its literal significance. This mild insincerity is artistically less pernicious than the other unconscious insincerity which takes for granted the doctrine and turns on the technique to set its verbal expression without rethinking it out and passing it through the crucible of the imagination. This results in half-hearted, under-composed, and as far as inspiration goes, insincere music. The question of sincerity is important. For no music is sincere which is not passionate, and insincerity is one of those moral qualities which are directly concerned in the production of a work of art—this is in fact perhaps the central point of the connexion of music and morals as discussed in the previous section of our argument.

Yet literal sincerity is not required of executants any more than it is of actors. It is possible to sing Bach's pietistic texts without in the least longing for death as a release from a wicked world into a better. Bach would not have chosen such texts, or could not have set them so well, if the particular beliefs of German Protestantism at that time had not represented his own convictions, but a modern performer can enter sufficiently into a frame of mind not his own by the exercise of his imagination as to give a faithful interpretation of them in music. The agnostic listener too has no difficulty in becoming a Christian for the space of time in which he is submitting to the sublime teaching of the *St. Matthew Passion*. Similarly a composer can no doubt enter into a text which may not be a literal statement of his own *Credo* and by imagination render it into music of a high degree of sincerity. But his sympathies must be with that text by and large—presumably he would not have chosen it if it had made no genuine appeal to him. Sincerity then is a matter of the spirit rather than the letter.

Literal sincerity may even bring about artistic disaster. Britten's *Rape of Lucretia* affords an instance of a composer associating himself as closely as he can with a librettist who has a definite message to convey, to which he attaches importance. The two timeless figures of the Chorus comment on the action of the drama, which has just finished in a splendid passacaglia, an ensemble of all the characters drawing together the threads and providing a climax. Their comments are a disastrous anti-climax, because they elaborate a state-

ment of Christian doctrine which has no bearing on the pre-Christian theme of the opera. The convictions of the two authors about the moral issue they have been presenting in dramatic form have already touched a deep well-spring of artistic creation, but the desire to improve the occasion and make a specific declaration of their personal and sincerely held convictions goes beyond what the artistic medium can carry. Here moral truth outrages artistic truth. There must be no clash of values in the artistic expression of moral issues—sincerity is not the only artistic virtue.

The texts of countless oratorios and operas deal with moral issues and the first fact about them is that the composer chose them for setting. He must therefore have sufficient sympathy with them to safeguard his own sincerity. The music he writes will be judged by the extent to which it has absorbed, illuminated and universalised what the words have particularised. Stanford has some observations on the relation of music to the morality of words. He says that it is not necessary to depict an ugly character or a horrible situation with ugly music. This is perhaps disputable, since truth may require a harsh expression, as Gluck long ago contended. But he continues "For music stands alone among the arts in one respect, it is incapable without association with words or action of being in itself indecent or obscene. The faults of which it can be guilty, as absolute music, are only faults of taste not of morals On the other hand the moment action or words come into play in combination with it, it can put a magnifying glass over every detail and can accentuate to the most appalling extent the suggestions which they give." And he instances *Tosca* and its torture scene as an example of music's power of enhancing such an immoral situation. Beethoven appreciated the musician's responsibility for his texts when he made his mistaken observation about the morality of Mozart's operatic libretti. A modern instance of music being infected with unwholesomeness till it stinks is provided by sundry works from the pen of Kurt Weill, which though satirical in intention reek of the night life of Berlin in the last years of the Weimar Republic. Such bad music, bad in morals as in art, is rare, but a good deal of ephemeral stuff owes its badness to its appeal to the baser impulses under the guise of music's fundamental innocence. This was a theme elaborated by Parry, (in *Style in Musical Art*).

There are occasions when music for its own artistic purposes depicts evil. Stanford quotes Pizarro in *Fidelio* as an instance of the portrait of a villain in which "there is not an ugly or even a crude

bar." But Pizarro is rather a cardboard figure only just villainous enough in Beethoven's delineation to provide the foil to Leonora ; he was merely the lever which lifts her heroism to the sublime. The quartet " Er sterbe " is a masterpiece of delineation of a moral struggle, carried even on to the physical plane, executed by means of the use of modulation and balance of keys, but the characterisation is more in the action than in the actual music. *Tosca* has already been quoted as a case of evil in musical action. A better instance—for here is characterisation—is provided by Vaughan Williams in *Job*, where Satan is depicted in his malice, and three wily hypocrites in their sneaking corruption. Here there is some stage action but no words, as in *Tosca*, so that the music is not employed in its function as magnifying lens but as itself the vehicle of the expression of evil. Now evil cannot be conceived without reference to the good, which we know by direct intuition ; it is a disruption of a spiritual order, the destruction of a kind of harmony. Music provides an analogue of this spiritual order, and within its system of tonal order and organisation disruption, distraction, self-contradiction in the form of discord, broken rhythm, false relation, unrelated tonalities, can portray the qualities which war against its order. Satan therefore is shown in the tearing asunder of the tonality, in leaps outside the octave, in the violent antithesis of major and minor tonality. He disintegrates the harmonic order, just as evil disintegrates the moral order. Similarly when the hypocrites come to " comfort " Job they are in Blake's vision the personification of his own spiritual pride, a form of self-deceit. The essence of hypocrisy is the ambiguity caused by its seeming one thing and being another. This ambiguity is easily symbolized in music that alternates between major and minor : the drooping third is first major then minor, and the accompanying triads fluctuate a semitone up and down. Score this for the oily, unctuous tones of the saxophone and you have the odium of false friendship depicted to the life—musical symbolism that no ear can mistake. This instance is an exception in the completeness of its success, for music that mocks an emotion is usually indistinguishable from the real thing. Weelkes's madrigal " Aye me, alas hey ho " is a lament on a dead monkey but it is indistinguishable from a real lament, and Bach's " Capriccio on the Departure of a Beloved Brother " contains a passacaglia that for feeling is hardly less poignant than the Crucifixus of the *B Minor Mass*, so difficult to make does music find the distinction between a heartfelt emotion and its simulation or shadow. Vaughan Williams

again is more successful when in his *Five Tudor Portraits* he makes little Jane Scroop lament for her dead canary, but he achieves the right touch by treating the childish emotion as perfectly serious and not a mockery of something bigger.

Some small quantity of art can best be described as *fascinating*. Out of a festering corruption grows an exotic, gaudy, sinister fascinating beauty. Fascination is an ambivalent emotion in which the attraction is enhanced by the concomitant repulsion. Strauss's *Salome* from the Dance of the Seven Veils to the end is an instance of music of such fascination; it dazzles, seduces, repels and conveys just that hothouse beauty of evil, the lurid, livid fungus growing on the dung hill. There is no philosophical difficulty in this, whatever the psychological problems involved in the ambivalent emotion, for art can take anything for its subject-matter that it can digest, anything good, bad, indifferent or evil. It is only indigestible subject-matter like propositions of geometry or syllogistic logic, economic and statistical summaries, and facts of history (William the Conqueror 1066), upon which music cannot exert its quite surprising powers of assimilation. Even the dogmas of the Creed can be, if not transmuted into music, at any rate taken in the stride of a setting of the Mass, and composers like Schubert and Dvorak possess uncanny powers of musical alchemy. If music can find the technical means of expressing evil, as it can by creating organised disorder within its own ordered harmony, the native innocence of the art is not contaminated by the evil, its beauty not affected by the bad.

Music however does prefer the good to the bad. Apart from the vast corpus of religious music there is plenty of music expressive of nobility, depicting aspiration and actually dealing with moral ideas. Beethoven affords the supreme instance of music which does all these things, and does it without much recourse to character drawing or stage action, using only a minimum of verbal text for giving specific expression to the ideas which occupied the composer's mind over a long period of years. If we examine the middle-period works from 1799 to 1808 we find a nexus of kindred ideas recurring like a thread through them. These ideas which occupied his mind in his early thirties were the ethical and political questions which the French Revolution and the Napoleonic Wars hurled at the individual just as similar events in our time have hurled them at us—questions of the status and dignity of man, freedom and the heroism which is its price. We know this from his recorded utterances, from the subjects he chose for setting to music and from other scraps of

evidence which provide a clue. Consider this list of works with their dates :

<i>Prometheus</i> Ballet	1801
Eroica Symphony	1804
The opera <i>Fidelio</i>	1805-10
Appassionata Sonata	1805
<i>Coriolan</i> Overture	1807
The Fifth Symphony	1808
Incidental music to Goethe's <i>Egmont</i>	1810

The thread running through them all is heroic endeavour against all odds, and the object of the endeavour is generally the achievement of freedom, the destruction of tyranny and the release of creative energy. Beethoven thus contributed to the liberal humanism, which animated all nineteenth century thought and conduct, which has for the last generation been in retreat all over Europe, which the first German war was fought to retrieve but which is thought by some historians and sociologists to be irrecoverable, at any rate on the European continent. In later life he passed on from ethics to metaphysics and in the third-period works he seems to be musing not so much on the practical as on the ultimate issues of life. He was an inarticulate thinker in words and when he did try to express his thoughts about reality, God and such philosophical questions, the words he used were more like incoherent rhapsody than the tight involved discourse of professional philosophers. But the essentially philosophical character of his music was recognised by Goethe in his own day, by others since and by the great general public that in time of war turned by the insight of instinct to his music for sustenance and encouragement.

This note, new to music, was first sounded clearly in the Eroica Symphony, which marks a turning-point in his thought and in his style and is recognised by critics as one of music's great water-sheds. Its subject-matter is heroism (in the rather wider sense of the German than that of the more specific virtue of physical courage which it connotes in English). We know what he thought about tyrants from his deletion of the dedication of the Eroica to Napoleon upon his assumption of the title of Emperor ; we know what he thought about freedom from his creation of the character of Leonora in *Fidelio* ; and we have a clue to what he thought about human potentialities in the odd scrap of music which formed the germ of three major works :—

Ex. 50



This is the basis of a movement in the ballet *Prometheus*. It is the subject when duly enriched by this counterpoint

Ex. 51



of the set of fifteen Variations and Fugue in E flat for piano (Op. 35) and lastly it is the subject of the finale of the *Eroica* symphony. What is there about this queer bass with its grotesque outburst of three repeated B flats fortissimo (which Tovey thought was one of Beethoven's boisterous practical jokes) and the almost jaunty tune that is discovered, after three preliminary attempts to find counterpoints of one, two or three added parts to it, to be its true partner, that Beethoven should have attached such importance as to use it three times over? Some musicians say that it has no special significance, only that Beethoven happened to like it. But why did he like it? It is true that we have unaccountable fancies and dislikes. But it seems highly improbable that Beethoven would have used it either in *Prometheus* or in the *Eroica* if it had not for him some special significance over and above what he might have made out of the double theme (bass and tune) as the basis of his E flat Variations for piano. Is it not more likely that it symbolized for him something that *Prometheus* the hero stood for in human

thought. Myth always embodies some piece of universal wisdom and Prometheus is in his single person the incarnation of two ideas—resistance to the tyranny of the high gods and artistic creation. The ballet for which Beethoven provided the music was not concerned with the Prometheus who stormed heaven to bring down fire for the benefit of mankind but the Prometheus who made figures of clay and breathed upon them the breath of life till they came alive. Beethoven admired men who defied fate to bring benefits to mankind but he could identify himself with Prometheus the creator. The pregnant nucleus of tonic and dominant, the explosion of the three B flats which releases force, the compact circle in which every note (except C) of the scale of E flat is wound firmly round the dominant and tied to the tonic at beginning and end is the symbol of creation, the generation of life. Its place at the end of a symphony devoted to the subject of heroic endeavour is to show by the use of variation form the manifold and abundant fertility of the soul set free for creation. Freedom is not so much an end in itself as a precondition of the highest activity of the human spirit. Certainly without freedom there is no creation. In this way, then, Beethoven expounded a whole ethical philosophy.

In *Fidelio* he was able to use the character of Leonora, upon whom he lavished the affection and devotion for which in real life he never found an outlet, to depict heroism expended in the service of freedom. Florestan is rescued from the dangers to which the black-hearted enmity of Pizzaro had consigned him by the constancy, the love, the determination and above all the heroism of his faithful wife. Count Igmont was another character who appealed to Beethoven "sombre resolution and strong dignity tinged with gleams of tenderness" is Dr. Walker's summary of what Beethoven admired—because he embodied the heroism that strikes for freedom in the struggle which he waged for religious and political liberty against the Spaniards in the Netherlands in 1567. The *Egmont* overture is therefore another instance of the expression in music of the ideals of character and the ideas of humanism that occupied Beethoven's mind in the first decade of the nineteenth century. Such ideas and ideals had not before found expression in music. It may be asked how can an interpretation of this sort be justified, how can a composer discuss such issues of ethics and politics in his music. The answer is to be found in the one word "Imagination" (which is the clue to symbolism in anthropology, to the nature of artistic creation in psychology, and to the theory of knowledge as it

is concerned with art). Two great authorities may be adduced to testify to this power of the mind to transmit by the medium of imagination the subject matter of diverse forms of the gift of the unconscious terms of music. One is a composer, the other a philosopher. William Byrd in his preface to the *Gradualia* of 1605 writes in an admirably precise Latin :

"There is in the ideas (*sententiae*) themselves (as I know by experience) a mysterious hidden power, so that to anyone who considers the divine mysteries and seriously ponders them in his heart the most appropriate strains occur of their own accord in some strange way and offer themselves copiously, even when the mind is sluggish." And the curious thing is that these strains, these rhythms, these images in sound, become signs or symbols. Like those of language and attach to themselves meanings. Thus Elmont's rhythm



in Beethoven's overture, depicting heroic resolution turns up again in Elgar's *King Olaf* to represent a similar idea in "I am the God Thor" as Mr. R. Nettell has pointed out, and a further instance *mutatis mutandis* occurs in the opening of Siegfried's funeral march in *Götterdämmerung*. Similarly, pastoral rhythm is so fixed in meaning that we all recognise it. It is this recognition which is the final court of appeal to establish the meaning of music. Beethoven compels our attention in these middle period works, because we recognise in them the message that had peculiar cogency and appeal during the years of world-wide war. Tyranny, revolution and war raged in Beethoven's time as in ours, and it was not coincidence but recognition that he too was talking of freedom and heroic endeavour that drove the great general public to Beethoven for spiritual sustenance during the second German war. If musicians cannot identify what he is talking about the public can. So too can a philosopher. Writing on aesthetics Samuel Alexander after much close argument breaks out in the declaration that no one who listens to great music "can help feeling its affinity in obscure ways to the great goings-on of Nature and human affairs."

It has been the aim of this discussion to trace this affinity and to indicate the way in which human affairs (morals, politics, conduct and character) can be subjects for thought in music.

3. LOGIC

If music is a way of thinking logic should take note of it, for logic is the study of thought.† Logic studies the principles of thought without regard to the things thought about, except in so far as the thinker must think about something even if it is only his own navel. Logic, however, is not interested in navels but only in the mind's operations when it is engaged in thinking about the navel or whatever. Logic usually employs the various sciences as its raw material: it can abstract the general principles which form the act of thinking from an observation of the mind at work upon chemistry, botany, mathematics or whatever it may be. It has thus built up a considerable body of doctrine about thought. Logic thinks about thought, but it has not paid much attention to the thought-processes of art, least of all music, since logicians usually know more about mathematics than counterpoint, and superficially at any rate it would seem that art and science go different ways to work upon their subject-matter, even if at bottom there is some basic unity in all the operations of mind.

As a matter of psychological fact the basic operation of the human mind is one of simple association, as can be observed in the development of an infant whose consciousness grows by stages from its primary reactions to stimuli, through Pavlov reflexes as the stimuli are repeated and the reactions become habitual and ultimately sub-conscious, to simple association by which the presence of one object or idea automatically brings the other in its train; the next stage is reached when between the associated ideas an act of predication takes place and the child at last says that its milk is hot, (meaning that it is too hot). By this time thought such as interests logicians has emerged. But this is not the way the artist's mind works. Can then the artist's mental processes when engaged in artistic creation be called thought? Is music in fact a way of thinking? If it is, what does it think about (for all thought must have an object, something to think about)?

If in psychological terms the first act of mind is simple association, in logical terms the fundamental act of mind is intuition, and intuition, that is, direct and immediate apprehension, is also the kernel of the process of artistic creation and appreciation. *Intueor* means *I see*, and in the last resort you either see a thing or you don't. Nor does it matter what is the subject-matter of your mind's occupation, what the object of your mental activity, the new knowledge or the new thought always comes to you as a flash of light out of darkness.

In the darkness you have been busy accumulating information, weighing conflicting evidence, peering this way and that, but when the solution comes you are passive : it breaks upon your mind, it occurs to you, as you say ; you see where a moment before you were in the dark. It is the equivalent in the mental field of perception in the sensory : the idea, the hypothesis, the certain knowledge, the cogent proof, whatever it is, strikes upon your mind from within in much the same way as the visual image falls upon your sense of sight from without. This sort of knowledge often guides our behaviour : we are confronted with a person and a circumstance and by merely contemplating the problem of their relation we get in a flash the answer to it, we see what is to be done and do it, though in the field of conduct the problem may be complicated by alternative solutions from which the mind, not to mention the will, has to choose and make a decision. In purely cognitive spheres it is always in the last resort an act of immediate apprehension that extends our knowledge. The scientist observes a set of phenomena and a set of consequences and in a flash he perceives their connexion, though the flash may only come at the end of a long period of exasperated groping for it. The end of a long chain of argument leaps suddenly into consciousness, the conclusion follows from the premises in a series of apprehensions. Sometimes one is aware of "nearly seeing" a deduction, but not enough current has banked up at the terminal for it to make the leap into full consciousness and so one goes over the ground again and lo, all is suddenly made plain. This intuition is also the root of artistic creation. In a sense the artist does not create or contrive, he merely sees. Many musicians testify to the continuous flow through their minds of musical imagery, melodic ideas, motifs, rhythms, *chant intérieur* of every kind, all they have to do is to select, "put your hand out and take what you want" as Elgar said of the process of inspiration.† The

† See below. Essay on Psychology, p. 127

selection itself is a process of seeing the possibilities of a grouping that somehow makes sense. Just as the constellations are seen by the astronomer—the stars were not organised in their constellation by God but are merely grouped by human observers—so a tune is a selection from Nature's noises by a perception of their possible relations. the tune occurs to its composer. he does not "think it up," though he may like Beethoven work upon it afterwards with something nearer akin to conscious contrivance.

If logic can say little more about intuition than describe it and the way it works, it can on the other hand endlessly discuss the mind's conscious contrivances. The technique of music may therefore have some logical affinities. Teachers of composition do in fact point to passages in student work where they say that the logic of a harmonic progression is not clear. Musical structure also has to have a logic of its own that convinces the listener not only of the coherence but of the rightness of a sonata movement. One of the difficulties of writing programme music is that the story to be illustrated takes place in time, as also of course does music, but the temporal order of events does not necessarily correspond to the temporal order of the musical sections or episodes, which may be arranged on some different principle such as key relationship or contrast of speed. The standing difficulty of interpreting the *Eroica* Symphony in terms of the career of Napoleon, which provided its starting point, is that the Scherzo follows a Funeral March so that the dead dictator seems to be livelier than ever on this naively programmatic interpretation of the symphony. It is possible to hear in the "*Eroica*," if you are so minded, some comment on Napoleon provided that you put chronological order out of your mind. Scherzo follows slow movement for musical not for historical or biographical reasons. Each movement discusses a different aspect of the qualities that made Napoleon; the funeral march is Beethoven's obituary notice of Napoleon, as he himself remarked (not quite in those words) when the death was announced. The logic is not the logic of events, which is founded on such philosophical conceptions as cause and purpose, origin and nature, consequence and change, but the logic of music which is founded on such purely musical conceptions as mode and key, rhythm and speed, tonal dynamic and contrast.

Perhaps the best example of a piece of programme music in which temporal order and other real-life categories have been successfully dissolved into musical categories is Tchaikovsky's *Hamlet*. It was

Mr. Holmann's good fortune when he came to make a ballet about Hamlet that he was not forced to re-compose Shakespeare's play leaving out the poetry. By taking as his starting point the line

"For in that sleep of death what dreams may come!"

he was able to place his dramatic action out of time, after Shakespeare's play was over in fact. The ballet is the timeless dream of the newly dead man; earthly categories are therefore redundant. But a ballet must have some internal logic and the logic of dream or nightmare is no logic at all. Tchaikovsky who has substituted second subjects and episodes, modulations and crescendos for dramatic events provides the choreographer with a structure whose logic is musical.

Here it may be necessary to confess to, and defend, the use of "logic" for "logicalness." Logic is the name of the study of thought,[†] but the thought so studied is logical and one can speak of the relentless logic of a proposition of Euclid or of the logic of the syllogism. Similarly musical logic is the logic of musical thought, and the nature of musical thought is fit subject for a logician's study if he is capable of appreciating how much thought goes into a passage of thematic development. Professional philosophers of strict views might regard this extension of the word logic as a use by analogy. No analogy is co-extensive with its prototype, and no musician would claim that music can state propositions, still less prove their truth or error, argue syllogistically or draw deductions, but he is prepared to assert that music is a form of thought and that being a form of thought it must employ the same processes of thinking as any other form of thinking so far as the subject-matter allows, and that any thought-process is to that extent logical.

One of the best definitions of music ever framed was Combarieu's "*La musique est l'art de penser avec des sons sans concepts.*" Non-conceptual thought is what a composer employs in constructing his symphony. The inspiration of the work is no doubt psychological, probably emotional, and the actual modulations may also have psychological promptings, but the technical process of making a continuous web of music from the musical ideas is a process of thought. Contrapuntists differ in their natural endow-

[†] It is sometimes more narrowly defined: Mill says the proper study of Logic is Proof, and he elsewhere speaks of the Science of Logic. He is therefore using the word scholastically. Scholastic logic is an academic discipline with a limited subject-matter. Formal logic is a study with an even more restricted subject matter.

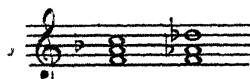
solving an algebraic equation or completing a syllogism are logical processes of thought, thought in sounds without concepts.

The musician who more than anyone has managed to think in sound with concepts is Richard Wagner. He had the German kind of mind which is happy with abstract nouns, delights in abstractions, thinks or at any rate expresses itself in universal in preference to particulars. He was not a systematic philosopher—he was too often absorbed with one idea at a time which in turn could be succeeded by its antithesis, Siegfried and Parsifal, for instance—and his philosophy has been belittled, but the fact remains that he is one of the few musicians of the front rank who could think at all in philosophical terms. There is a philosophical idea behind every one of his music dramas. He had a philosophical type of mind and could comprehend the problems of philosophy. He imported concepts into music by means of leitmotif. Now a leitmotif is not in itself a concept but by the mind's powers of association it becomes the equivalent of one, and Wagner's use of his motifs was not determined by purely symphonic logic but by their conceptual significance as affected by the drama. Identity of key for instance expressed the continuity of an idea, modulation a change or development of it. His symphonic texture thus not only embodied concepts like gold but abstract ideas like redemption, and its development was determined by a curious blend of musical and philosophical logic. The passage in *Götterdämmerung* where the two "Greeting to the World" themes are combined and expanded as the scales of ignorance drop from Siegfried's eyes at the moment of his murder and then merge into the chord motif of Fate modulating from C to E as it does so, offers an example of conceptually determined musical logic.

The actual translation of concept into motif is the ultimately mysterious one of finding musical equivalents or extra-musical ideas, illustrative or descriptive, with which songs and programme music are full. Music is almost a semantic language with its pastoral rhythms, excited tremolandi and astonishing powers of suggestion. Imagination not logic is the department of the mind in which to search for the unobtainable clue. But Wagner's inspired invention, though by far the most thorough and extended penetration of musical with conceptual thinking, is not the only instance of a composer finding a motif to stand for a concept. Beethoven in his later works was constantly hankering after articulate meaning from wordless instrumental music and invented, in his struggles to make

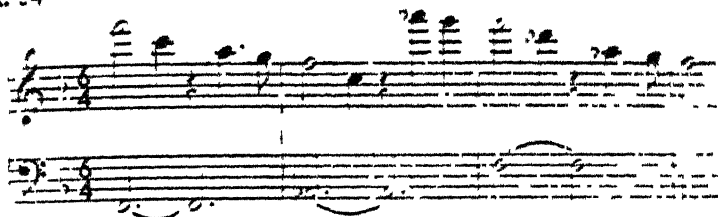
music express concepts, instrumental recitative. The "Lebewohl" sonata shows how the concept of leave-taking—and it is a concept not a particular instance—kindled a musical composition out of a motif that was the musical equivalent of the concept. But an even better example of a concept leading to an extended and strenuous argument in purely musical logic is Brahms's third symphony. The F major symphony is based on what is known to have been a personal motto with Brahms, "frei aber froh," F A F, a sort of retort to Joachim's "frei aber einsam." So that the psychological starting point of the symphony was this assertion of self-sufficiency. But it was a peculiarity of Brahms's musical make-up that in the key of F he could not resist the progression, of which he was fond in other keys.

Ex. 53



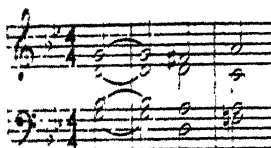
Now it so happens that F major is a key with a peculiar tendency towards flatness. It is the subdominant of C, but subdominance is a relationship of flatness common to all keys, so that it is not uniquely but only conspicuously flat. It is however also the only key founded on the notes of the diatonic scale of C which has any flatness at all. All the rest are sharp, and F major in its single individuality has to assert the claims of flatness against the fifteen accumulated sharps of the other keys. Another phenomenon of flatness associated with the key of F is the difficulty that choirs find in keeping the pitch when singing unaccompanied in that key. They tend to flatten. All this might be mere superstitious exploitation of pure coincidence were it not that absolute pitch has been shown by the discovery of formants to have a direct effect on tone quality (as in instruments) and tone character (as in vowel sounds). F may very well have a "dominant resonance region" that gives it a predisposition towards flatness. Anyhow, there it is: F is a flat key. How flat? One flat, says the ordinary man, but Brahms with his partiality for a flattened six-three chord on F (cf. the cello sonata in F for a conspicuous instance) is disposed to argue that F is flatter than one flat, that A flat can be found in F major as well as F minor, that F major and F minor are hand in glove to flatten all the music they touch. And so he begins his symphony with this crashing false relation between the outside parts

Ex. 24



in which he excuses this breach of classical behaviour by revealing it into his favoured chord of the flat six-three. The false relation for this period a violation of logic, and indeed provides an example of something like a musical fallacy, provided always that the premises governing classical music are accepted. The classical period in music is strictly the eighteenth century, but most of the canons governing classical music remained in force through the romantic nineteenth century which was its complement. These canons were the absolute supremacy of tonality, the major-minor key system. Walford Davies (in the article "Key" in *Grove's Dictionary*, Supplementary Volume, 1939) makes an illuminating point when he says that from Bach to Beethoven key exercised a centripetal force, every related key was pulled into and held tightly in the orbit of the main tonic: Handel's firm dominant-tonic cadences are the extreme expressions of this tendency. Beethoven reversed the process and contrasted keys were held on a looser rein, because the ear had by a century's practice accustomed itself to the gravitational pull of a tonic and did not need the constant reassurances of Handel's perfect cadences. But Beethoven's bold key transitions were only possible because the mind was assured of its central tonic. The basis of the key system with its two modes, major and minor, only began to be undermined by Wagner's extreme chromaticism in the *Prelude to Tristan*. Brahms's use of false relation in his third symphony was perhaps a similar symptom of the loosening of the major-minor key system, for classical harmony did not permit the ambiguities to which the coexistence of differently inflected thirds and sevenths gives rise. It would not have been ambiguous in the sixteenth century when a polyphonic texture and the use of the old Church modes made a passage like this possible and logical

EX. 55



temporal order of tonic and dominant harmony had not yet become the main pillar of a key system and the progression of the chords was determined by the movement of the parts, which here follow modal practice. But this kind of thing was regarded as subversive of tonality at the time in the eighteenth century when all music's resources were being devoted to strengthening the feeling for key and the exclusive use of the major and minor modes. English composers have always shown a partiality for this particular harmonic idiom, so that it cannot be regarded as an absolute logical fallacy, i.e. something inherently self-contradictory, but it is an example of a piece of musical logic, of purely musical thinking, which in a certain stylistic context and period is anomalous. Its name, "false relation," might have been borrowed direct from a text book of formal logic. Brahms uses the anomaly as the starting point for a protracted discussion of another problem of musical logic—how flat is, or can be, the key of F major. This discussion he pursues through four movements, and twenty bars from the end of the finale he is still inflecting his third degree of the scale alternately flat and natural. The struggle over the inflection of the note A proceeds by definite stages: from the ambiguous tonality of the opening a strong move towards the major is made by putting the second subject into A major, a very sharp key in a context of F and asserting in the strongest possible manner the naturalness, not the flatness, of A. The second movement is in C with a middle section in G, still on the sharp side but less extreme than A major. The third movement slips down well into the flats again by turning C major into C minor, with its trio section going one degree flatter still to A flat major. The finale opens in F minor, relative minor to A flat major, tonic minor to the main key of F and darker, more thundery and flatter than anything yet heard. The second subject begins the process of reducing the flatness by going to C major, where A is natural, not flat. Even now however there is a relapse to C minor with three flats for the third theme, but after much turbulent argument the key signature changes back to one flat for the coda, and though the motto Ex. 54 is recalled the last few

hers are unambiguously in F major. The conclusion of a long argument would seem to be that F major is flatter than one would think, that the interval of a minor third is a Janus facing towards major as well as minor, that things are not always what they seem and the simplest things are really complex if you scratch below the surface.

This discussion of symphonic logic does not, of course, exhaust the interest of Brahms's symphony nor exhaust its attributes. Its psychological origin postulates an emotional content. Fluctuating dynamics are a feature of all music—they are indeed one of its dimensions. Nothing has been accounted to the theme of which it is constructed, and the harmony and counterpoint by which they are built into a symphonic fabric are from their nature musical thought, though conceived in a sensory, instead of an intellectual, medium. But the issue of tonality can be isolated: the key of F is the subject of debate—of thinking in sound without concepts (although tonality is no doubt a concept)—for flatness and sharpness are involved in the discussion not as concepts but as particular factors of a quasi-algebraical character. If logic studies the processes of thought and this issue of key is a way of thinking, here surely is a case of musical logic which approximates to the discursive logic of the syllogism, the nearest that music will get to logic as ordinarily understood.

To this account of music as a kind of thought, a way of thinking about the world, must be added some account of music as knowledge, a way of knowing. The contribution of the art of music to the theory of knowledge belongs by accepted philosophical convention to metaphysic rather than logic. Thither we may pursue it, guided by such additional illuminations as aesthetics may shed on it.

4. AESTHETIC

WHILE the connexions of music with logic and ethic do not lie on the surface the case is naturally different with aesthetic, whose subject-matter is the nature of art and the experience of beauty. In the last resort we find that the three chief sorts of judgments of value, what is good, true and beautiful, have no hard and fast boundaries of exclusion. Beauty is truth, truth beauty, and both are good, but their fields are quite distinguishable and our present

business is to concentrate on the beautiful and see what music has to say to that.

The observations of philosophers on music have not been very illuminating—the poets are better—because music has had to be forced into the strait jacket of their metaphysical systems, especially had their views on art to be fitted into their theories of knowledge. Music is but one of several arts, and the philosopher in framing his account of beauty must consider art generically, not music specifically save in so far as the peculiarities of music (such as its immateriality) may introduce qualifications of, or impose limitations upon, his general theory of art. This indeed is music's chief function in aesthetic discussion. Here and there philosophers have dropped a passing word, often aphoristic in form, about the nature of music. Many of them, Aristotle, Kant and Hegel, call it in one form or another the language of the emotions, which imitates, reproduces or expresses psychic states, passions and sentiments. It has been called with more subtlety by a French writer "*la dynamomètre de la vie sentimentale (or passionnelle)*." Nietzsche and Schopenhauer however see in music an expression not of feeling but of will, and Harclerick in the middle of the nineteenth century attacked these emotional accounts of the nature of music and reduced its essence to sound and motion, to *arabesques sonores*. Most later attempts have been directed towards establishing music's claim to be a kind of knowledge or thought, and some modern philosophers notably Croce, Samuel Alexander and R. G. Collingwood, have by pursuing the intellectual line attempted to rescue aesthetics from its plight as the Cinderella of philosophy.

For professional philosophers since Plato have never done their duty by aesthetics, though the subject admittedly comes within the scope of their studies. Ethics has claimed all the attention they can spare from metaphysics, and problems of conduct have seemed more important than problems of taste, partly because everyone has and must have views on morals, while most people get along very comfortably with no definite views on art, and partly because even philosophers have felt the pressure of religion, with its insistence on morality, upon their thought. But more recently interest in ethics has yielded ground to the new metaphysics which has followed closely on the new physics. The new alliance of philosophy and science has left the non-mathematical philosophers with less to philosophise about, and they have begun to turn from the investigation of the Good to explore the significance of the Beautiful.

Besides intellectualist theories which make a total case for the intellect there has been a big movement of thought in which emotion is displaced from the position long assigned to it as the core of the aesthetic experience in favour of some special sense, a specific aesthetic power and property of the mind. This doctrine is a partial denial that art is concerned with emotion. The debate is shifted to asking whether the emotions of art are not a special excitement, a specific emotion of beauty instead of ordinary feelings "collected in tranquillity." The movement, in which philosophers, musicians, painters and critics formed a new alliance marching under the banner of Significant Form, was concerned to argue that the emotional excitement caused by works of art is due to a special aesthetic sense and that the satisfaction of this aesthetic impulse is a unique kind of exaltation quite independent of the emotions of ordinary life. A picture may evoke such ordinary emotions because it is to some extent representative and therefore evocative of memories and emotional associations; so too programme music and all music with a literary basis (such as opera) will very pleasantly evoke ordinary emotions. But this type of emotional response, says the new aesthetic, is just precisely not the true aesthetic pleasure. If the question is asked what then accounts for the emotional excitement provoked by art, the answer is Significant Form. The inadequacy of the term is obvious: if a thing is significant it must signify something. What then does significant form signify, what does "pure" music signify? To which the answer is "Nothing beyond itself." It conveys some force of meaning even if that cannot be resolved into other terms, and the conception of a specifically aesthetic response to art was accepted not only by Roger Fry and Clive Bell for the artists, by Dr. Ernest Walker as spokesman for all who hold that abstract instrumental music is more truly music than the impure music of the voice and the dance, but also by philosophers (Samuel Alexander and Cyril Joad among them).

The painters' argument for form as the essence of art, though it minimises the part played by subject-matter (what the work is "about") does not deny emotion a place, as is apt to happen in philosophers' theories. Roger Fry and those who think with him accept the emotional character of artistic experience and avoid the intellectualist fallacy. Modern philosophers, (like Croce and Collingwood), who unlike their predecessors have been concerned to treat aesthetic with no less respect than ethic and metaphysic, have been so concerned to connect up art as a cognitive activity with

their general theory of knowledge that they have overlooked the emotion which to the ordinary man is the most obvious feature of aesthetic experience. Collingwood for instance is content with saying that beauty is the emotional colouring which transfuses the entire experience of artistically imagining the beautiful object. Pleasure and pain are involved in the creation and appreciation of art and in the enjoyment of beauty, but no place is found in this theory for the specific emotion as the subject-matter of art. To him as to Croce art is primarily a kind of knowledge. That art is a kind of knowledge will be argued under Metaphysic, but a place has to be found in it for emotion, even if emotion is no longer accepted as the heart of the matter. The doctrine of significant form, whatever its other defects, does not at any rate make the mistake of leaving out the feelings and so does avoid the defects of the philosophers' aesthetic. Indeed it prefers to outrage common-sense by its willingness to exclude most pictures and all literature from the realm of art on the ground of their indissoluble subject-matter (representation of real life in pictures and ideas of real life in literature), rather than to flout psychology. The argument then runs :

We have an aesthetic sense ; its activity is the contemplation of formal relations ; it is as much detached from the instinctive life (i.e. the emotions of ordinary life) as any human activity that we know ; it is in this respect on a par with science.† The aesthetic emotion is not about sensations, or objects, or persons, or events, but an emotion about relations, i.e. formal relations like the relationship to each other of the notes composing a tune, about " inevitable sequences." Formal organisation is the essence of art ; recognition of form for its own sake gives rise to the aesthetic emotion, but inasmuch as the different arts unfortunately require a subject-matter in which to embody these formal dispositions, other elements, the sensuous qualities of pigment and tone, worse still objects of real life and literary ideas, introduce extraneous emotions by association, memory, resemblance and the incurable tendency of the mind to treat images as symbols. The different arts suffer from this in different degrees. Mathematics is unfortunately not an art, but if it was it would be the supreme art because in it no subject-matter is

† It is interesting by the way that the other school, the Philosophic, in regarding art as a kind of knowledge also abolishes the old antithesis of science and art. Thinkers of all schools unite in regarding them as kindred activities of the mind.

left lying about unattached. It is the contemplation of relationships without any "things" to be related. In that case, it is to whose condition on this doctrine, rather than to the fact that because sound has a very tenuous physical body, it is free from literary contamination it is the best of the art, which, if distorted, it is true, by practical utility, a further disadvantage. In the graphic arts the unfortunate fact has to be faced that the artist creates shapes without seeing the objects in which these shapes are embodied and not even the greatest painters can escape the necessity of representing objects upon their canvases—the subject-matter has to be indigestible. Literature is in still worse case—the matter of words, not their formal pattern is predominant in poetry. But in the purest art it is the formal relations which absorb the subject-matter. These significant forms signify nothing beyond themselves: it is the significance of their internal coherence which produces the aesthetic emotion. Botticelli's Venus for instance thrills the observer because of its "wonderful organization of spatial content."

This aesthetic, though it will raise scepticism when it explains the satisfaction of Botticelli's lovely Venus in terms of spatial organisation without reference to the poetry of the conception and will be rejected altogether in its extremer form which denies the name of art to literature, fits absolute music better than any of the emotional doctrines, except perhaps the one that regards music as the dynamometer of our affective life, since there is great difficulty in ascribing specific content, emotional or other, to chamber and symphonic music in sonata form. But any aesthetic doctrine must account for all art, as well as natural beauty, and because it suits chamber music it will not do for musicians to accept a doctrine that makes nonsense of painting and drama. A milder statement of what is the same doctrine by Dr. Ernest Walker is not without difficulty because it is derogatory to that half of musical art which depends on words or a programme or, still worse in his view, is allied with dancing. But since he does not press the doctrine to its logical extremity and draws no hard and fast line between pure music and music contaminated with a programme the case for it is more reasonable. That case is based on the old antithesis of the "How" and the "What," the manner or form and the matter or content. Music, he allows, cannot jump off its own shadow, and his fellow Balliol philosopher-musician, Donald Tovey, allows as much in his assertion that the one thing that music cannot digest is an absolute musical form,

such as a canon which, though free from all taint of words or non-musical associations, is "imposed from without" (i.e. presumably prescribed as the "what"). Form and matter may be one in that they are indissoluble, but, if the composer treats them as identical, what he will produce will be not music but a quasi-mathematical puzzle. There must then be some substance, not shadow, for music to jump off, some subject-matter to be treated as the raw material for the creative faculty, some "What" for the "How" to inform. Music must be about something, but we need not bother much what it is about. A musician's emotions (if the "What" is emotion) are not different from other men's emotions and are of no particular interest to outsiders. This is going perhaps too far in dismissing the special acuity of artists' sensibilities and feelings, but at any rate it avoids the fallacy of intellectualism. So that what makes the work of art embodying these not very special emotions interesting is just precisely how they are treated; the form it is, not the content which makes the work good or poor. "Instrumental music is the purest and highest, because most self-subsisting form (of the art) and considered in the abstract apart from the quality of the music itself (does not this almost beg the question, which is one of quality?) there is a gradual decline of value through the addition of words that in some way express personal conviction to—a great leap this—words that have not this expression and so down to acting, the art of which the essence is to pretend." Clear as this is and based as it is on convictions that go beyond art into metaphysics he does not insist, like the extremists, in purging art of all works contaminated with an important "What" in the shape of words or a programme, and he allows further that "any ostensibly non-independent music will really, if fine in itself, stand on its own feet without requiring support from more than the finger tips, so to speak, of whatever words or action or vocal programme the composer may have coupled it with." Nor are pure and impure music divided by a rigid logic nor separated by a hard and fast line. The doctrine is thus acceptable in inverse ratio to the rigidity of its logical statement. But it has caused, or at any rate lies at the back of, much prejudice against opera. The "What" of opera looms so large—the high mortality of operas due to bad libretti and foolish plots is proof of the importance of the "What"—that many musicians consign opera as an art form to perdition as the most impure of all music. There is more intolerance shown towards opera than towards anything else in music (the intolerance towards chamber music by lowbrow wire-

less heterodox and towards the more revolutionary imagination, and the superficially musical is not the misfortune of people without the knowledge and experience, as the anti-opera demonstration are. Yet opera contains some of the greatest and best as well as the most moving music ever written—opera admitted and enjoyed with emotion. A doctrine therefore which treats opera as if it were music in the same sort of way as Roger Fry treats modern painting as not-picture (but illustrations) must therefore be accepted, if at all, with reserve.

Its strength as so stated is that music of the highest integrity, music which exists for its own sake, is no mere sensuous entertainment but a form of thought. Its weakness is the division of music clean down the middle into pure music and the rest. It denies what is surely a psychological fact that our experience of music is one and not two sorts of experience, although for purposes of classification and analysis we may distinguish absolute and programme music, vocal and dance music, and it disregards the origin of music in song or dance. Some, like Dr. Colles, have declared that "strictly speaking there is no such thing as pure instrumental music" and that it is only intelligible by reference to the voice, that it is indeed "merely an extension of vocal music." Colles finds the origin of all music in "human impulses finding expression through the voice." Others may think the rhythmic impulse with its roots in the ordinary physical activity of the body to be the primary source of music. But whether dance or song came first, rhythm and melody, their main constituents, are both necessary to music, which thus has its origin in anything but pure instrumental composition. This is not to deny the evolution of higher from lower art, but it is a *prima facie* argument against accepting a view that kicks away so firmly the ladder upon which music climbed on its long evolutionary development.

Three methods may be employed in exploring any subject. So far the method of analysis has been employed, and whatever light it has shed upon art it has thrown none on beauty. Philosophers work by analysis; they do not scorn introspection, which is chiefly mistrusted by biologists and other scientific thinkers; they usually accept a hint from introspection, follow it up and reach a decision which depends on the way it fits into their metaphysical scheme; in other words the philosopher's theory of art has to be reconciled with the theory of knowledge that he holds. As for introspection it is being rehabilitated and is being used with good results in the

psychological study of music. The artists themselves and the critics of art also work by analysis, but without any philosophical predispositions ; they just analyse all the art known to them and take the greatest common measure as the essence of the thing. But there is also the genetic method of the historian which can be suitably transformed and used by psychologists ; this looks first to the origin of a thing to explain its nature. There is of course some danger of confusing the ancient origin with the present nature, but this evolutionary way of thinking has been so enormously fruitful that it cannot be given up. It leads to very different conclusions from those of analysis and denies that formal quality is the essence of art or the norm by which it should be judged. It would seem therefore that any account of art needs both a metaphysical and a psychological statement, one to explain its place in the nature of things and the other its place in human nature. The explanation by origins may also be offset by a teleological explanation. Having found out whence art came we should also enquire whither it is going and what it intends to do, seek its function in fact. In the one case we tackle the question "What is art ?" by first asking how it comes into being ; in the other case we discover the nature of art by looking at its fulfilment.

The origin of art is not to be sought in a separate instinct, such as might, if postulated, have provided a basis for the emotion of significant form. It is uneconomical thinking to postulate an instinct for every activity of body or mind, and in this case it is unnecessary, since there is already a recognised instinct that will provide the dynamic origin required to account for art. Just as science may be derived from the instinct of curiosity so art may be derived from the instinct of construction, which is seen in the nest-building activities of birds and in the behaviour of bees. Animals build to serve their biological ends. Man follows their example and builds for use. This is craft. In making articles for use, whether houses to live in or cups to drink from, the craftsman tends, if he has any energy and leisure above the minimum necessary for bare survival, to beautify his constructions, or at any rate to make them as comely as he can. He begins to be an artist, and indeed we speak of the arts of building and of potting, just as we speak sometimes of cookery and surgery as arts, in that they involve making and contrivance and skill and are susceptible of being well or ill executed. But they are not fine arts. The cave man who makes a pot to drink from and ornaments the handle of his hunting-spear with arabesques

and finally draws a splendid bison on the wall of his cave is a craftsman who becomes an artist. For having drawn his bison he steps back to look at it, he takes pride in the work of his hand as he contemplates it, he calls the next man to see it, hoping no doubt to win admiration for his picture but in any case bursting to show it. These actions make him an artist: when he makes something, like the image of the bison, not for use but for contemplation, he is engaging in fine art; the showing of it to his fellow is the communication of something, an excitement, an emotion, an obscure prompting that had made him work upon the stone; the observer has the experience of beauty. In this moment of creating a work of art, of contemplating it and communicating its message, beauty was born into the world and fine art began. There are lowly arts as well as useful arts, cooking and healing the sick for instance, and cooks will talk of a beautiful pudding just as surgeons will speak of a beautiful scar, but the man who scratches his bison on the wall or fashions a tune to a verse for the pleasure of it has something different in mind from the cook and surgeon, who are not engaged in fine art for contemplation. He forgets all about the sympathetic magic with which he is credited—the hunter trying to induce a fine animal on to his spear-point by making an image of him. All he cares for is the lovely image he has just drawn, the entrancing tune he has just sung. It is the beauty of the thing that fills his mind as it does that of all beholders and auditors. He did not aim at beauty, for he did not know what it was, he was absorbed entirely in what he was doing, but when he had done it he was filled with the joy of it and found it beautiful. So did God, having created the world, rest on the seventh day to contemplate his handiwork and find it good. (The Book of Genesis is slightly in error here since it puts the recognition of the goodness, i.e. the beauty of the world, on the sixth evening, and makes the rest follow on the seventh day. At any rate the contemplation came after the work of creation was finished and God found it good, even if He used the seventh day not for contemplation but for rest).

The origin of art, then, is in the impulse of making. Language confirms it, for the word "poem" is derived direct from Greek *ποίημα*, which is merely something made, from *ποιεῖν*, to make. Beauty is an experience resulting from the contemplation of something made. So beauty is, as the proverb says, in the eye of the beholder. And this is where the beauty of nature comes in. For we call mountains and women beautiful as well as works of art.

If this should seem to make beauty a purely subjective thing incapable of being shared and utterly unreliable as a canon of taste and with no reasonable claim to be of any value to anyone except the person experiencing it at the moment, the proverb can so far be amended as to say that the beauty lies neither in the object—beauty is not a quality of things like colour or weight—nor wholly in the fancy of the beholder, but in the relationship between the two, whereby an element of mind interpenetrates the matter. The eye contributes something to the appreciation of natural beauty even if it is only a kind of selection from all the phenomena that are presented to it. The appreciation of natural beauty has been described by a philosopher (Alexander) as creation in the less exacting form of selection, and selection has been described by a physicist (Eddington) as the contribution of the mind to the knowledge of nature. This is a return to idealist philosophy with a vengeance. Berkeley in the eighteenth century taught that material things can only exist for a mind that apprehends them, and now the physicists, who in the nineteenth century held matter in high regard just because it seemed independent of mind and wholly subject to mechanical causation, say that nothing, not even matter, is but thinking makes it so. Thus Eddington :—

“ Not once in the dim past, but continuously by conscious mind is the miracle of the Creation wrought. The element of permanence in the physical world which is familiarly represented by the conception of substance is essentially a contribution of the mind to the plan of building or selection . . . The building to which I refer is not a shifting about of material ; it is like building constellations out of stars. The things which we might have built but did not are there just as much as those we did build. What we have called building is rather a selection from the patterns that weave themselves.”

The idea of selection as a lesser kind of creation, creation on a lower plane or in a less exacting form, will cause no difficulty to musicians, who are accustomed as performers of other men's compositions to creating music in a less exacting form. Beauty, then, is in the eye of the beholder to the extent that it contributes the element of mind to the relationship between seer and thing seen. It is important to have so located beauty, for no aesthetic can be satisfactory that takes no account of natural beauty. Yet the feeling for scenery, the conscious seeking for the beauties of nature is quite a modern phenomenon. It would no doubt be going too far to say that the ancients or our own civilised ancestors were unaware of the

beauties of nature, since poetry is full of them, but they were taken for granted, as in the old folk-songs where "the lark in the morn'" or "the cuckoo in the morn'" had that singeing as she flies" testify to the poet's eye, his concentrated observation of his environment. But a soldier, a poet, a priest, a hermit to take immense pains in order to go and live in the high upon mountains, which to his eighteenth century, he bears were very "horrid," and especially detestable when the heather was in bloom on them. It would therefore be fatal to found an aesthetic theory of beauty that could be upset by a change of taste such as that from a dislike of heather to an admiration of it. Yet the force of language insists that the beauty of nature and the beauty of art afford the same kind of experience. Beauty is beauty whether of a waterfall or of a piano concerto, of a statue or even of a woman, in whose beauty biological overtones may be admitted without resolving her beauty into mere sexual attraction. To regard beauty then as the product of contemplation (an active process, by the way, though less feverish than the prior process of making or creating) affords a definition of beauty wide enough to include nature as well as art. The search for the origin of art has thus revealed the nature of art, if it has told us no more.

That the fallacy may be avoided of confusing origin with worth or value, the other end of the enquiry may now be opened. The defence tactics of analysis has been followed by a flank attack on the question of origins and should be followed up by a similar attack on the other flank of function or purpose.

The practical arts, like cooking, plumbing and surgery, serve an obvious purpose, they are useful in the struggle to keep alive and happy. Above them come the functional arts or crafts. In making up or a house its maker bears in mind that its main purpose is to be for drinking or for living in, but as the potter handles the clay the architect poises his pencil over his drawing board sheer attraction for the material, sheer play with the idea, causes him to elaborate or simplify his conception with a view to making it pleasant to his eye. If he is a bad potter or architect he may in the false rests of decorative effect make his cup too narrow in the brim or heavy and the house dark because the windows are in the wrong place for illumination of the interior. In the crafts beauty is subservient to function, though functional objects like ships and railway engines have an odd way of encompassing a beauty of their own. A ship or an engine should not be a work of art—it is not

there for contemplation but for locomotion—but it may incidentally satisfy the aesthetic sense. Craft is functional art that does, after serving its primary purpose, allow of some gratification to the aesthetic sense when submitted, not for the moment to use, but to contemplation.

But what purpose does music serve? To give sensual pleasure to the ear, to stir the emotions by sympathy so as to purge them, in somewhat the same way as Aristotle claimed for tragedy, to impose order upon the subconscious mind as Plato claimed for rhythm, to engage the mind by communicating to it the intuitions, the imaginations, the thoughts of the composer? Its unique quality is due to the material it employs, namely sound-waves, just as the unique quality of painting, which is equally a fine art with music and shares the nature of all art, is due to pigment, sculpture to stone, literature to words and ideas. What makes a man an artist is his sensibility and his imagination, but what makes him a musician is his ear, his flair for manipulating disembodied sound, his mysterious ability to convert images of sight, abstract ideas, traits of personality, dramatic tension and indeed a great deal of the stuff of life into that amalgam of pitches, rhythms, timbres, harmonies, speeds, and dynamics which is music. With fertile composers like Mozart, Schubert and Benjamin Britten you can almost see their minds take fire from external stimuli, such is their feeling for their material. The individual touch of the artist and his feeling for his material determine his individual quality, whether he be painter or pianist. Touch, not merely of the hand but of the eye and ear, is responsible for all the unaccountable idiosyncrasies which cause painters to like their tone to be luminous or opaque, light or dark, musicians to like their sounds to be bright like Berlioz or saturated like Wagner and all artists soever to incline more or less to classical or romantic feelings.

It is the element of address or communication which, using the congenial medium, gives the artist his purpose. In communicating his message he creates beauty, sensuous beauty that woos the ear, passionate beauty that sways the feelings, and sublime beauty that grips the mind. Some works of art there are which by their sublime austerity seem hardly to aim at pleasing, or wooing; others by the violence of their feeling not to sway but to compel, others by their concentration to convince. Their beauty seems in such cases to be nearer akin to truth and their success ought rather to be expressed in terms of rightness than of beauty. Truth indeed rather than beauty

seems to have been the course of Beethoven's life. He was concerned to transmit his revelations to the world. With the emotion of the fourth piano concerto, *Coriolan*, or the fourth, fifth and sixth piano concertos. The *Missa Solenne* and the Ninth Symphony cause many people pain. The music of these works belongs at least as much to the search for truth as to the quest for beauty. Moussorgsky hammered out a style of music and a melodic idiom that was faithfully to reflect the intentions of natural speech. The resulting "realism," a term borrowed from philosophy and changed in meaning, encountered an opposition that condemned it as "a frantic orgy of hideous distorted sounds," but though by no means a strong-willed man he held fast to his view that art representing beauty only, in the material sense, is "crude childishness, art in an infantile sense." And the "new shores" to which he set his sails were the shores of truth, truth to nature, truth to characterisation, truth even to the last vocal inflexion. It should follow from this that not only are beauty and truth related, but that music as such is a communication between minds not only of emotion but of knowledge. Its aim is a kind of revelation, even as Goethe said of Beethoven's genius.

Nor are beauty and truth its only ends, for we in commonest parlance speak of a good work of art. The concept of goodness belongs primarily to morals, it is an ethical notion, yet it is borrowed and applied to gross material objects like eggs, to what is useful like suits of clothes, to those happy inspirations which we call good ideas. Our first reaction to a new symphony is a quick judgment that it is either good or poor. So that art has also the quality of goodness, for the common use of language is not to be overridden even in deep matters of philosophy. When the Greeks wanted to indicate that a man was of supreme excellence, what we might call a true gentleman, they ran the word for good and the word for beautiful into one and called him *καλοκαγαθός*. Keats with a poet's vision blurted out the interconnexion of beauty and truth, though philosophically speaking he spoiled his statement of their identity by adding that it was all we need know about them—he overlooked the good.

These three goddesses, Virtue, Beauty and Truth, are what give value to life. They point to nothing beyond themselves, we strive

to attain to them for their own sake—hence the disinterestedness of art which is one of its hall-marks. They are the ultimate values. Value, though a term borrowed from economics where it is always a means and not an end—a thing is valuable to you either for a purpose you have on hand or valuable in exchange for something you want for another purpose—value has become a term in philosophy that has transcended its own meaning and is the end towards which all of our own activity is directed. Without the ultimate values our poor strivings make no sense. We make our music simply because it is worth while to do so, in that it creates beauty and truth. How do we know that? How do we recognise beauty and truth? By intuition, the elementary and ultimate act of mind, which is the beginning of all our knowledge. We simply see that it is so. No proof is needed. To the composer an idea “occurs”: he does not create it. He broods upon something inchoate within him that requires expression at the urge of his instinct of construction, and then suddenly it, the melody he was seeking, wells up into full consciousness, and like the scientist of old he cries Eureka. Similarly the performer and the listener grasp by a process that has some resemblance to recognition, an immediate awareness that *this*, this melody, this symphony, is somehow right, and its rightness, its beauty, is apprehended in a flash of insight. So do we make moral judgments; we intuit, we recognise that such an act is right, such a trait of character is good, such a personality grown old and wise is also beautiful. And it is only by reference to these direct intuitions of what is good, true and beautiful that we know evil, error and ugliness. Art therefore begins and ends in intuition. The artist, by hypothesis a man of keen sensibility, quick emotion and lively imagination, is impelled to create a work of art by instinct. When the object is made he contemplates it to decide whether it is true to his vision; others contemplate it and find it beautiful. Its beauty serves no ulterior end. It merely enriches life, makes life more valuable. And men recognise its nature by intuition, the primary act of the mind with which God has endowed them.

5. METAPHYSIC

METAPHYSICS is the study of what lies behind scientific knowledge. Science tells us about the physical universe—though science has been having trouble lately between the principles of causality and

indeterminacy—and the various humanities about the human mind. But the implications of science have not ended. Thus, physical science has lately pointed out that solid, concrete, material objects like tables are scientifically speaking assemblages of electric charges rushing about in empty space. Things, including tables, are not what they seem. Appearance is different from reality, which is only saying what the earliest philosophers observed about the world long ago. Reality is the subject of metaphysical regard. There are, it appears, different orders of being, which metaphysics takes as its subject-matter and tries to ascertain how real they are. Now, whatever the reality of the physical world, it can only be known to a mind—it might as well not exist if mind has no awareness of it. Perhaps the table argues in the same way—if I lean on it it may claim knowledge of me, but there is no evidence for this. The table which I lean on is mindless, while I who lean on it have a mind and know it—certainly know it better and more fully than on the other hypothesis it knows me by my weight. The relationship between me and the table is one of knowledge and knowledge is the only measure of its reality. It follows that philosophers who set out to study reality find themselves studying knowledge. Ontology, in the jargon of their trade, becomes epistemology. Descartes when he said *Cogito ergo sum* perhaps went too far in implying that the relation between knowing and being was a causal relation (which is what *ergo* = *consequently* implies). But he did thereby postulate that knowledge was a form of relationship between knower and thing known. Knowledge, like beauty, is thus a relation between a subject and an object. The nature of this relationship has divided philosophy into two main schools, idealism and realism. Idealism argues that in knowing, what we know is something in our minds, something mental—the table you know is an image in the mind because its only existence as far as you are concerned is your experience of it and there is no room for wooden legs and polished surfaces in your mind. Realism argues that the table has substance outside your mind, which seems more commonsensical but leaves unanswered the question how if it is outside your mind you can know it. There is a head-on collision between these two views, which incidentally have no connexion with idealism regarded as ethical optimism or realism as political cynicism. This is no place to refine on my excessively crude simplification of the subtleties of thought which the most powerful minds have for centuries been bringing to bear on this central problem of knowledge and being,

nor need one make a choice and range oneself under one banner or the other before considering whether music has anything to contribute to our knowledge of knowledge or shows any peculiarities of being (reality).

Music is a communication between minds. It has, it is true, a physical body—and modern physics would not be disposed to allow that air vibrations are more tenuous than atoms whirling in a void—though that body does seem more immaterial than that of the table whose acquaintance we were trying to make. Musical sound, regarded as significance (not as vibrating air which only causes sensation), is a mental rather than a physical phenomenon ; it is therefore easier from the point of view of theory of knowledge to know than much of our common experience of the external world (tables and the like). We need not therefore discuss idealism and realism but merely ask what sort of knowledge is our knowledge of music. We can distinguish a number of levels of such knowledge. Bach knew his own music in the unique way of the creator : its basic ideas had been his own intuitions, its strains his own elaborations of those ideas, its totality the product of his own technique (betraying itself to us in a dozen characteristic signs-manual). But inasmuch as his purpose was communication what we have to discover is the nature of the knowledge enjoyed by those to whom the communication was addressed, to wit you and me. A knows it by heart and can reproduce it on the piano ; B knows it in that he is familiar with it all, even if he cannot play it, can perhaps play, hum or whistle bits of it, knows its general outline and structure, could analyse it, could describe it, could certainly recognise it ; C knows it in that he has heard it several times and remembers the emotional effect it always had on him—he has its flavour ; D knows it because he has played it through, though he retains no very detailed recollection of it ; E is now hearing it for the first time and only knows it in so far as he is making its acquaintance. It would seem that A knows it better than E. But does he ? The most vivid knowledge is immediate awareness, which is near akin to intuition in its immediacy—intuition is immediate knowledge from within and awareness immediate knowledge from without. If A and E are sitting together at a performance of the *B Minor Mass* E may have the more vivid knowledge but less complete than A's. He is learning, A knows. E's mind is fresh to the experience, the experience is fresh to E's mind, and the object of his mind's engagement is something coming into existence, not actually existing until the last note is

...decide is intrinsically enough it can be
...er it is, it has ceased to exist. The
...standing a performance of the B Minor Mass. ...
...on not being but of becoming. Yet the B Minor Mass,
...before I was born and will last ...
...as there are minds that can ...
A perhaps can be said to have ...
...en during the performance, ...
...is more a process of becoming than a state of being. It is
...perhaps the ontological peculiarity of music — and of the realer world
...over a few pages to the last essay he who finds some further
...observations on the nature of music's existence — a connection with
...performances that during the war were threatened with physical
...extinction. The musical work—Brahms's C minor symphony is
...the work in question—exists complete at any instant of time although
...its performance must be extended in time. The mind encompasses
...this paradox by the fact that at every moment in the progress of the
...music it remembers what has gone before and has some awareness of
...what will follow—Brahms's C minor symphony cannot in the middle
...of the development section of the first movement suddenly proceed
...to Beethoven's C minor symphony. There is therefore a continuity
...of knowledge, and by virtue of that continuity the mind deeply
...engaged with Brahms's first movement is both learning and knowing,
...is observing the symphony both becoming and being. It is not
...merely the extension in time that accounts for an element of becom-
...ing in the reality of the symphony, it is the fact of organic musical
...growth. The symphony realises itself, becomes real, in the process
...of its unfolding, of its becoming. Yet its existence as a symphony
...is independent of time and even, as I learned from my war experience,
...of circumstance.

Knowledge of a symphony and its real existence are therefore on all fours with other kinds of knowledge and being, except that by virtue of the continuity of knowledge they manifest with singular clarity one feature of existence and one feature of knowledge, namely that neither is a static state; becoming (which can be translated organic growth, or change, or musical development according to the context) is a part of being, and knowledge is not always and necessarily a state but is sometimes a process.

Now if we ask *what* do A, B, C, D, E know in their knowledge of music, the answer, so far as cognition is concerned, is tonal relation-

ships. But we know that values, feelings and sensations, even representations of nature, are also involved in the communication of music, and all these may be objects of knowledge. In fact, A, B, C, D and E have each a unique experience of the music, although they may by comparing notes get down to a common substratum of agreement about it—they have a unique and incommunicable experience. Direct knowledge of the music is inexpressible. "In listening to music there is no means of communicating to another individual the immediate nature or aesthetic value of the experience other than, perhaps, by letting him hear the music."[†] It is not only incommunicable, it is different, because each knower, A, B, C, D and E, brings a different mind, product of a different environment, physical constitution and musical education, to bear upon it. It follows that such knowledge, which includes both immediate awareness *of* and discursive knowledge *about* the music, is different for every person, so that the knowledge itself is a unique relation between subject and object, just as beauty is. If beauty is in the eye of the beholder, knowledge is in the mind of the knower, whatever objective reality, whatever separate substantial existence may be attributed to beautiful object and thing known.

Knowledge is of truth : if you are mistaken you do not know. Philosophy, ever changing its views on the nature of knowledge, made up its mind about that long ago. Musical knowledge, knowledge of musical works of art belongs therefore to the great body of truth, and though we are more aware of sheer beauty in some music and sheer rightness, conviction or truth in other music—the relative degrees of the sensuous element in the experience may predispose us to use such variations of language—all serious music has one foot in the camp of truth. This knowledge presents itself to introspection as immediate awareness, it is direct knowledge of music not knowledge about music and sometimes in extreme cases comes near to mystical knowledge, which by definition is a kind of short-circuited awareness of ultimate reality. Thomas Morley described music as "a ladder to the intelligence of higher things," which I have no hesitation in interpreting as a means to the apprehension of ultimate reality. Mystics do not use the ladder, they just soar. But musical experience is commoner than mystical, and we musicians do find in musical experience a ladder to the intelligence of higher things. We also find that as a result of this experience we

[†] Glyn Haydon, *Mus. Ass. Proceedings* 1944-5.

develop a love of music and an interest in it. It is not a knowledge which is immediate like the knowledge of what is beautiful. It is a matter of the emotions and does not concern itself, except in so far as we begin to take an intellectual interest in it, with aesthetic matters. We therefore develop an interest in the history of music, its history, read its biographies, analyse its forms, investigate its acoustics and even its mathematical basis. At the end of this book we explore its ramifications into other departments of human knowledge. A, B, C, D and E, according to their various mental propensities, build up each for himself a background of discursive knowledge. Now this discursive knowledge, peculiar to each individual, interpenetrates with that immediate knowledge which, as we have already decided, is peculiar to him. His experience of beauty is also peculiar to him. The interpenetration tends to increase if possible the peculiarity of the experience for every individual. Knowledge *of* and knowledge *about*, while remaining recognisably distinct to introspection, can and do affect each other so as to increase the peculiarity of musical knowledge. One might almost say that there is no such thing as common knowledge of music. Let me quote two instances of such interpenetration of immediate and discursive knowledge of music.

Some years ago the Czech composer Weinberger wrote in complimentary vein a set of variations on an old English folk-song "Under the spreading chestnut tree." The Czech, despite his good intentions, had little idea of Englishness in music, and the incongruity of the piece led me to ask what was this old English folk-song. All that seemed to be known about it was that it was being sung at the Duke of York's Boys Camp as an action song. But when Miss Anne Gilchrist, who knows more about tunes of the British Isles than anyone, living or dead, heard Weinberger's Variations issuing from her radio she said promptly: "This is not 'Under the Spreading Chestnut Tree,' this is 'Go no more a-rushing' from the Fitzwilliam Virginal Book," and proceeded to relate its history. Observe now the identity of the tune from which we all three, Weinberger, F. H., and Miss Gilchrist, start. If one was not being philosophically careful one would say that the three of us had identical knowledge of the tune *qua* tune. We must not say that, for no musical knowledge is identical, as we have already decided: Weinberger is a composer and a Czech, I am a critic and an Englishman, Miss Gilchrist is a scholar and a Scot. Three minds with but a single tune—but three lots of knowledge. But now note how the

discursive knowledge possessed by us three emphasises the differences from each other in our immediate knowledge. Weinberger heard the tune and it seemed sufficiently exotic to him to be English. I, who have a nose for the English note in music, was outraged by the mixture of styles in the Variations. Miss Gilchrist whose discursive knowledge is vast was more outraged by the wrong attribution than by the actual music. These secondary reactions thus interpenetrate with the immediate experience of the music.

The other instance also concerns a discrepancy of style—I choose such instances because they make more clearly than anything else could the distinction between immediate and discursive knowledge in one and the same piece of music. I recently heard a symphony by another Czech composer, Mlýna—that they were both Czechs is purely fortuitous and has no significance political or artistic; it is merely an offence against the laws of mathematical probability. This was my first acquaintance with the man and his music. Immediacy was therefore the hallmark of the experience of listening to the music for the first time. But the symphony set up curiosity about its date: its first movement is in a concise sonata form, its slow movement in a simple binary form and its finale is fugal. Doubts at once arose in my mind about the origin of the work, and my expression of them got me into trouble with Czech scholars. The controversy itself has no bearing on the matter which is our concern at the moment. The point is that knowledge *of* and knowledge *about* that symphony were interpenetrated at a single hearing. One philosophical and one practical conclusion follow from this continuity in knowledge. Expectation is a legitimate element in the continuity of knowledge, as I argued a few pages back when I said that a piece of Beethoven's C minor symphony could not be interpolated into Brahms's C minor symphony. Expectation and memory are therefore elements in the immediate experience of music: the one binds the future, and the other the past to the present. The practical conclusion is that all study of music, all acquisition of discursive knowledge, all musical appreciation, history and biography is helpful and not, as some maintain, irrelevant to musical experience, quite apart from the intrinsic interest of those subjects.

In the kind of knowledge so far considered, however wide its range, there is a strict correspondence between the knowledge and the thing known—the whole of epistemology turns on this correspondence. There is however a kind of knowledge, of which music supplies some instances, in which a symbol stands for a rich and not precisely

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determined content of meaning. I have already referred to Anthropology (p. 43) the symbolising propensity of man and I shall further elaborate it in Psychology (p. 125). The symbolising object of immediate apprehension, is a form without content, a wealth of meaning, not all of it into actuality by any means, but with feelings and ideas. But in so far as the symbolising object, in the nut, is a concept and as the actual meaning of the nut is to exercise itself upon, the symbol conveys knowledge. Thus in the folk-song "The Seeds of Love" the flowers are forms which embody knowledge of the different kinds of love. It is a poetical way of knowing about love. But the knowledge has not the precise boundaries that non-symbolic knowledge has. The red rose tells you something about true love that lacks the precision of a treatise of psychology or the immediacy of personal love at first hand, but it tells you something worth knowing, and the symbol may penetrate to different layers of the reality of love. Poets, who use symbolism, tell you truths, and in so far as you learn the truth through their symbolism you have knowledge. Music sometimes conveys symbolical meanings†—programme music for instance. It is, as I shall argue in Psychology (p. 127) a language, which can convey surprisingly definite meanings. Mendelssohn, it may be recalled, claimed that the meaning of music was more precise than that of words, though the reverse is the generally accepted view. Such poetic symbolising is the work of the imagination rather than the rational intellect. Metaphysicians limit their discussions to the rational but there is no reason why a place should not be found in the theory of knowledge for the kind of knowing done by the imagination—after all imagination and intuition are both forms of cognition, departments of intellectual activity. Music then as symbol gives us knowledge.

With this comforting doctrine we can attack the final problem of musico-metaphysical relations. Can music philosophise? More concretely did Beethoven philosophise in his third period works? If music is a symbolical form that will hold a content of meaning, of truth to be known, then we can legitimately look for metaphysical truth in music which we know by virtue of our ordinary musical sensibilities, perceptions and experience, is not merely the expression of emotion, merely the weaving of sonorous arabesques nor programme music describing events. There is a fair measure of

† I discuss Music and Meaning in my *Key to the Art of Music* p. 34 sq.

agreement by people who know Beethoven's music well that in his last period he passed on from those topics of humanism which occupied his mind from the *Eroica* symphony to *Egmont* to something transcendental. If it is indeed possible to discuss metaphysics in music then, it is claimed, that is what he must have been doing in the posthumous quartets and the last C minor piano sonata. Just what then does he discuss? There is a hint in the F major quartet that he may have been discussing free will and determinism a problem that lies outside epistemology, in the movement headed,

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But not too much weight must be put on that argument—nor on the other hand need it be too summarily dismissed. The answer seems to be that this last music is essentially visionary, that what it contemplates is reality, the ultimate nature of Being shorn of the accidentals of physical existence, i.e. that it is nearer to mystical than to rational knowledge (mysticism I have already defined as a short-circuited knowledge acquired by by-passing the insoluble epistemological problem of realism and idealism, how can anything be known, how can anything outside one's head get into it?) Music provides the symbolical form which can hold a rich content of large but imprecisely limited meanings, such, for instance, as God. The search for God or Ultimate Reality is a philosophical undertaking of unimpeachable respectability. Even the mathematicians have been finding themselves doing precisely this almost without realising what they are doing—some of them at any rate recently concluded that God could only be a mathematician. Beethoven then was in his late works seeking some such vision of ultimate reality.

Consider the string quartets in E flat (Op. 127) and F (Op. 135) and the C minor piano sonata (Op. 111). In each of them deep feelings are to be discerned; the finale of the E flat quartet and the slow movement of the F speak more of feeling than of vision—though to be sure if one saw Infinity one would feel some awe, and we must not be so analytical as to divide the indivisible in these exalted movements. But in other movements the search seems to be for some aspect not of the human heart but of the universe. Beethoven not being a systematic philosopher has left us no complete account of the universe and it would be folly to suppose that he gives us the vision not merely of reality but of totality. A single

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...ment may perhaps give us some idea of the nature of the
... of it. We may therefore expect to find the first movement
... the E flat quarters first movement as a whole, which
... seems to be human. The opening is a simple, direct
... consider serious issues. The first subject is a simple, direct
... movement. The recurrence of the first subject in the
... deeper note, but it is not a question of a deeper note, but
... of the emotional level, as though it were a question of the
... The finale, more like the middle-period works, is a simple, direct
... "human" quality is of course part of the first subject, and
... and therefore a part of himself—expressing a form of
... rejoicing in the richness and happiness of the world. The
... flat, which is associated in Beethoven with the essential human
... human achievement, is some confirmation of the mood and meaning.
... The mood and meaning of the slow movement, a set of variations, is
... more abstracted from terrestrial things. It is a movement of quiet
... contemplation. But of what? Can one say of Beethoven (as
... certainly of something beyond the notes, which he says in Op.
... 111) according to strictly musical canons of behavior that the
... are subdivided and figurations elaborated, the effect of which how-
... ever is to expand and intensify the vision. It is undoubtedly
... visionary but it does not indicate what is the object of the vision.
... Is it Beethoven's first probe into the remoter regions "as far as
... thought can reach?" The Scherzo comes down nearer to earth but
... is pretty abstract. Is it perhaps an abstract of motion itself, a
... glimpse of that little bit of reality?

The F major quartet begins with a question and its last movement does the same. The quartet is described by most commentators as smaller and less searching than its companions, just as the eighth symphony is less arduous than its companions on either side of it. The key too is the same, F major, no key for the greater profundities. The Scherzo is almost hearty, unbuttoned Beethoven, though some call it grotesque and others tragic, at any rate it is provocative rather than assertive or reflective, questioning in a half-serious, half-jocular vein so that you don't really know what he is getting at except that he is getting at you. The slow movement, which has some affinity with the Cavatina in the B flat quartet, is a movement of rapt contemplation and deep feeling, but is an expression of a mood of reverence rather than a discourse on the divine. Its submission (or reconciliation) however is dispelled by the questioning last movement with its superscription "Must it be? It must be, yes,

it must be." This however like the scherzo is half humorous, Beethoven calls it a very difficult resolution to take, but the music does not sound as though it is as difficult as all that. If it was a problem of conduct that is the subject of question and answer in

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the movement based on the mottos, we do not know what it was, But it is at any rate feasible that Beethoven may have been debating some more general issue, a philosophical if not a very solemn issue. He had a way of turning general ideas of a conceptual character into motifs or instrumental recitatives so as to think them out for himself in the medium in which his mind worked more easily than in words. The Lebewohl sonata and the Ninth symphony provide instances—there are others scattered up and down the sonatas. It is possible therefore that he was debating a difficult resolution such as that which confronted A. J. Balfour once in a London mansion. He was at a reception in an upper room, supper was to be served downstairs, from the drawing-room a double staircase descended to the hall. A friend found him rooted to the spot at the top of the stairs and said "Hullo, Balfour, aren't you coming down to supper?" To which Balfour replied "Yes, but how am I to get down, for there is nothing whatever to determine a choice between the right hand and left hand stair." His practical dilemma in which he did not know which way to turn had at the back of it the problem of free-will and determinism. Balfour, who was incidentally a musician and a philosopher as well as a statesman, suddenly confronted the paradox that if your will is completely free your action is paralysed because you cannot choose, but if your choice is predetermined by some consideration that fetters your absolute freedom, you can in fact choose what you will do. Beethoven's movement strikes me as just such a philosophical argument on an issue about as serious as Balfour's dilemma.

In the last piano sonata the music merits the epithet transcendental: it transcends normal experience both in feeling and in thought. How? There is nothing like argument or probing by normal logical processes of thought, such as we have found in some movements of the two string quartets, such for instance as the question

and answer of the French quartet. Not argumentatively, as the sonata is akin to poetry as Plato's philosophy is akin to poetry. Just as Plato dealt with philosophy by including it in poetry, so Beethoven dealt with philosophy by including it in a kind of poetic philosophy, so Beethoven's sonata is so much as giving his metaphysical view of the universe, his vision of reality, in the only language where he could do it. In the Variations of the Annetta, one cannot reach the heights of height and depth. The arabesque soars to the vault of heaven. And then by descent into the bass in neighbouring variation, and by the wide span of the two hands upon the keyboard Beethoven's music now encompasses the universe and eternity. It is not possible without using this imprecise sort of language to convey in a metaphorical way the philosophical substance that is embodied in the music, though the music is precision itself (as Mendelssohn said it is: it was precise) and completely logical (in the musical sense that the variations are logically deduced from the theme of the Annetta).

If the content of this sonata cannot be more precisely rendered in words how much less can the three great quartets, greater, deeper and more sublime than the ones we have discussed--the A minor with its Heiliger Dankgesang, the B flat with its Cavatina, and the C sharp minor which, for all its questing into the things beyond sense, does not forget that humour is also part of the scheme of things. The three are the product of one huge attempt by Beethoven to grasp in the years between 1824 and 1826 the scheme of things as far as one mind could master it in music--there has been no comparable attempt before or since.

Metaphysics deals not solely with knowledge, though that is central to all the questions it asks. It deals with the Reality behind appearance, with the Kantian trio of God, freedom and immortality, with man's place in the universe, with ultimates. Philosophers reason about these high matters, poets lay hold on them with poetic vision, mathematicians find themselves at the end of their equations reconstructing the universe to make it fit their conclusions, religious mystics strain language to communicate what they have learned by direct apprehension. Is there any reason why musicians should not also reveal as much of the eternal verities as by contemplation they can, following Beethoven, bring down from Heaven to earth?

MUSIC AND PSYCHOLOGY

THE MUSICAL FACULTY

WHEN a conductor stands up in front of an orchestra and imposes on it his will and his views about the music it is playing he does so by the power of suggestion—and suggestion is a psychological phenomenon. When an audience in the height of summer will stand through a long programme at a Promenade Concert it exhibits two psychological phenomena, the satisfaction of the impulse of gregariousness and a kind of masochism, i.e. self-inflicted torture to show love (of music). When a pianist gives a recital without a note of music in front of him, he does so by virtue of memory, a special kind of memory maybe, but a psychological phenomenon. It would seem therefore *prima facie* that the connexions of music with psychology are not so recondite as those we have already sought between our art and anthropology and philosophy. A text-book devoted to the psychology of music† begins bluntly and indeed rightly :

The art of music is a creation of the mind of man. All its characteristics and organising principles depend upon the action of the mind. All its effects upon us when we listen to it, all that we do when we perform it or create it, are determined by the laws of the mind Thus if we are to have any ultimate explanation of music, it is bound to be in terms of psychology.”

This is too large a claim, since one might equally say of mathematics that it involved the action of mind and therefore must find its ultimate explanation in terms of psychology, and so on for every other branch of learning. But it is true to say that every aspect of music can be psychologically studied. With mutual profit to both psychologist and musician.

There are various techniques by which it can be done. Observation of behaviour—there is one school that defines psychology as

† By James L. Mursell.

the study of behaviour—is the primary method, and it gave us the body of doctrine which may be called academic psychology, such as was applied with wisdom and humanity to pedagogy by William James. Another fundamental method is introspection, which has been given a badge of scientific respectability by combination with the use of the questionnaire and statistics. A third is the even more scientific use of laboratory experiment, though human subject-matter will never permit so vigorous an application of scientific method as the natural sciences nor attain to such certainty in its conclusions. Finally there is the special kind of analysis, first practised by Freud, Jung, Adler and other psychotherapists, which explores the subconscious as well as the conscious layers of the mind. All alike employ the general methods of observation and analysis.

To simple analysis let us therefore resort in the first instance.

Consider the performance of a musical work—any work will do—and begin to strip off it one layer after another, like a cook peeling an onion. Each layer of the onion is capable of elucidation by psychology. If it be objected that by the time we get to the heart of the onion there will be no onion left that is true, but we shall have the components before us and know a little more of what goes to the making of an onion. We are not trying to find out how to grow onions but what they are made of. The first outer layer is the actual performance not critically regarded but considered solely as a phenomenon presented to the mind through the ear. It comes as a piece of organised sound, and that sound is analysable into the elements of pitch patterns and time patterns. Sound has other qualities : power and volume, intensity and extensity, concordance and colour (timbre), and a formal organisation whose recognition depends on memory. The appreciation of these various qualities, which we speak of as belonging to the ear, is susceptible of further elucidation. Rhythm, for instance has been subjected to laboratory experiment, and pitch is the subject of one of the most satisfactory of the discriminatory tests devised by the American psychologist, Carl Seashore. Memory, second only to brilliance of execution as the most spectacular of musical phenomena, presents a wide field for investigation and comparing of notes among those who do and do not possess the gift ; furthermore it takes one near to the core of music's identity and coherence, for, if the mind retained no recollection of the beginning of a long piece of music by the time its end was reached, the piece would have no appreciable unity, could make no claim to be a work of art and would in fact be literally unintelligible.

This psychology of hearing—of the ear, if you like—is only the physical body of the music that confronts the organ of hearing; what of its meaning? What does it convey to the mind and how does the mind apprehend the message presented to it? This is the next stage of the enquiry, and a whole branch of psychology has been devoted to kinds of listening, types of listeners and ways of comprehending music. Next we come to the thing apprehended, the composition itself. What is a piece of music? Can we say for the moment that it is the expression in sound of an idea, the reflection of an emotional mood, a work of the imagination, the product of an impulse? What impulse? The play impulse, the impulse of construction, the sex impulse sublimated to a different kind of creation? Here we come to the psychology of instinct and emotion, and perhaps to the psychology of inspiration. But the imagination is not concerned with emotion except as the source of its excitation; the imagination deals with ideas and images—auditory images for a musician—and that ultimately mysterious alchemy which transmutes ideas from the world into the disembodied imagery of sound patterns. Psychology should have a lot to say about the imagination.

But imagination, though the chief agent in artistic creation, is not the only intellectual power exercised by the composer in the act of creation. So we go on to ask how the mind of the composer works. A plausible answer is that some experience in which his feelings are involved stirs him to a certain kind of excitement, which in its turn stirs the imagery stored by his memory; the new experience selects from the old images a new conjunction and combination; suddenly a new idea is born clothed in these images—it occurs to him, as we say—just as a new human being is created by the new combination of two old cells. The nature of the new idea is that of a revelation, which the artist sees with sudden clarity in the eye or hears in the ear of the mind. We call it an intuition (cf. *Logic*, p. 77). But this intuition is not a fully conscious process like this exposition of it; it involves the sub-conscious hinterlands of the mind, and we are now committed to some form of psycho-analysis, probing the recesses of the mind for enlightenment about the nature of inspiration. Here we encounter some queer cases of conflict and divided personality: Schumann who was both Florestan and Eusebius; Moussorgsky, described by Balakirev as “almost an idiot” while he was still a young man, who ultimately disintegrated owing to the inability of a weak will to hold together the warring elements of his unstable

character, Tchaikovsky with his own peculiarly sensitive personality; Peter Warlock, who like Schumann took to himself; Alban Berg, sensitive and highly cultivated, who occupied with subjects of public interest in his musical diary; composers (Britten and Cecil De Mille) who compensate in their art for the absence of the usual social graces. This is the most immediately interesting material for psychological enquiry, but nevertheless the most profitable.

The other elements in a musician's make-up—the composer or performer, his nationality and his period, his social position, his education are not psychological enquiries since they are so much part of the individual as force-acting on him. His inner technical ability, which involves the application of conscious mental procedures like those of other arts and sciences, raises the question whether musical talent is a general or special ability. In what imagination and intuition take place below the level of full consciousness technical ability and hard work are their complement. The place of work in genius has been vouched for by so unlikely a combination of authorities as J. S. Bach and Thomas Carlyle. The psychological dissection of the individual musician, the last task to which the analysis of musical experience can be pushed. Our onion is in flakes before us. Let us examine some of them, beginning with the ear.

Aural endowment, or what the musician inaccurately calls his ear, was divided by Seashore into six separate capacities, and he devised a series of tests for estimating the individual's abilities in each. These tests have never found favour in English educational establishments and they were abused in America, where admission to the Rochester Conservatoire was for a time dependent on passing these purely aural and in no way artistic tests. They are somewhat discredited as tests but as a description of the powers of the ear they are illuminating. Seashore postulated six powers of the mind: it must

1. discriminate pitches,
2. discriminate intensities,
3. judge lengths of time,
4. judge smoothness or otherwise of consonance,
5. remember what it has heard,
6. apprehend temporal patterns of sound (rhythm),

to which he subsequently added a seventh test for the discrimination of timbre, which he admitted might not be so elemental as the measurements of pitch and intensity.

Two other American psychologists, Kwalwasser and Dykema devised ten different tests, those supplementary to Seashore's being a test for phrasing, (what they called tonal movement, a test which if properly designed might very well be significant for real musical ability), a test of melodic taste, and tests for what they called the imagery of pitch and rhythm but which was merely the ability to identify notation with sound. Criticism of these tests has reached a fairly general agreement that they are not really tests of musical ability at all, that they are tests of aural endowment which may have a quite low correlation with proved musical ability, that they are too purely cognitive and leave out entirely the emotional element, that something less elementary and more comparable to Binet's intelligence tests is needed, that phrasing which in practical musical criticism is what marks the musical person would provide the best basis for a test, if a satisfactory one could be devised. Even if Seashore's findings on the basis of these tests can only be accepted with reserve it is still worth while to use them as a starting point for the investigation of three of the ear's functions, pitch discrimination, rhythm and memory.

Pitch is the primary musical gift : the unmusical person is he who cannot tell one note from another. Seashore after thorough investigation estimates that in respect of pitch discrimination a person may have an ear of natural innate capacity 200 times better than his neighbour, and that training has no effect on this physiological capacity. This view, which was the conclusion based on an extensive use of his tests, has been contested on the ground that there is in the apprehension of pitch an element of perception by which the mind organises what has been presented to it by the senses : the experimental results, it is urged, do not invalidate the view that pitch discrimination is not a purely aural matter but involves the central nervous system and the brain, that it is a functional activity of the mind and not an organic reaction of the body. However that may be, Seashore admits that increased interest and attention can make a better score in his tests. The commonly supposed superiority of the blind is an illusion except in so far as it is the result of increased attention. Seashore also finds that general ability makes a better use of all the musical talents. But he concludes that increased sensitiveness to pitch cannot be acquired after it is once developed in childhood, and it is of course well known that the limits of pitch hearing contract as one gets older.

Ability to hear fine distinctions of pitch is the primary musical

of the ultimate point of the interval, and we cannot go. It does not however follow that we cannot hear the difference between two intervals other than the frequency of the notes. The fact is a recommendation to take up the question of the interval is not the whole of violin playing. So the question of the interval has never been accepted by critics who are not deep in the subject. The interval does at any rate provide a criterion of the quality of the interval. The interval presented to the violinist is a double interval, and the interval is where one (double) vibration is equal to the other. The interval is the interval which is indistinguishable by most ears. In the interval of the interval, the scientific use of these tests, which has been made in the interval, is a personal game than a serious educational process. The interval is a striking case of success in accurately distinguishing the interval. The interval was that already quoted (p. 7) of a girl student at the Royal College of Music who explained that she had been brought up in the Near East where the immemorial monodic music was a measure of harmony for the sake of melodic subtlety was a common experience. She therefore found no difficulty in hearing this minute interval. What bothered her was the immense complexity of a Brahms symphony which she tended to spell out analytically in the same way as she listened to the small melodic inflexions of oriental music, a method which was fatal to grasping the over-all logic of a harmonized paragraph of Brahms spread over a dozen different instruments. This case perhaps throws some doubt on Seashore's claim that pitch discrimination is in the last resort a sensory and not a cognitive ability, and that the limit is determined by the physiology of the ear, for here plainly experience had developed the ability beyond the best "European" ear. In point of fact the physiological mechanism on which pitch discrimination depends is unknown. There is no certain knowledge of the way the ear works, though Helmholtz's theory is usually accepted that the harp-like structure of the basilar membrane and the rods of Corti vibrate in sympathy with the vibrations coming in from outside and so enable us to recognise differences in pitch. But the organism is too delicate and minute to show the smallest differences to the anatomist's microscope: as an ear specialist put it, the differences between ears are functional and not organic, i.e. physical ears are indistinguishably alike and the great, manifest and indisputable differences in aural capacity must be attributed to powers of the brain and not to physical differences in the ear.

In the case of discrimination of intensities this is not necessarily so,

... of deafness have physical causes, such as the transmission of sound, disturbances of the ossicles, the small bones of the middle ear, or the cochlea. The cognitive element has also to be considered. Seashore devised an experiment to distinguish between the native capacity for judging musical intervals and the subject's hearing, but owing to the fact that the sound was rhythmically and intermittently presented, the intermittent sound heard at one instant is not the same as that heard at another. These variations can be related to the personal characteristics of the observer, so that two observers may show the same results in the test, but A may have the poorest ear and B the best, and B is the keenest ear and the poorest mind. The experiment is a good illustration of the interplay of these two factors, the native capacity and the cognitive. "The blind" says Seashore "may use the auditory resources as a substitute for the visual resources, and may find new avenues for advancement in their power to discriminate by intensity; but by so doing they do not improve their native sensory capacity; they simply learn to use it in progressively more complicated and meaningful ways." Again therefore one finds this experienced investigator saying that the native capacity of the ear cannot be improved yet the native capacity of the sensory and the cognitive elements sufficiently happy to establish his case. Here in the matter of intensity the sheer physical capacity of the ear is not an isolatable factor in musicality, it is linked with a cognitive factor.

The cognitive element destroys the value of Seashore's test for consonance - the brain overrules the ear; what is heard is no sooner heard than interpreted, and interpretation at once invalidates a test for native capacity in distinguishing the smoothness or otherwise of the two intervals to be compared. The test consists of sounding one interval (technically defined as a bi-tonal clang) after another containing one note common to both clangs and asking the observer to state whether the second is better or worse than the first, better and worse standing for degrees of blending, smoothness and pleasurable-ness to the ear, and consonance being preferable to dissonance when it is not referred to a harmonic context. A consonant interval, as we know by experience satisfies the ear by itself, and dissonance leaves the ear uncomfortably demanding a resolution. But this test has been rejected as hopelessly unreliable "even for the purpose for which it was designed" and Seashore in his later book (1938)

admits that it left out of account several confounding factors. Of these the phenomenon known as fusion ("not a third, but a star") proved to be an incalculable factor, since intervals (of auditory impressions) have a number of characteristics, some of which might affect the judgment. One of them is certainly the implications, as was shown by Dr. Markham Lee, who submitted himself to this test and found to his astonishment that he had declared the interval of a minor third to be "better" than that of a major third. Enquiry showed that he had interpreted the major third as a diminished fourth, his possession of absolute pitch having revealed to him that the note common to both intervals was *C* flat-sharp, which suggested the key of *G* minor to him and so caused him to misjudge the actual physical smoothness (the mathematical smoothness that is) of what he heard. Perception therefore plays a larger part than sensation in the apprehension of this musical element. There is other evidence of the uncertainty of the test: octaves and fifths, octaves and major thirds show in much too high a percentage of cases a variable judgment (in preference for the less mathematically consonant interval). Like or dislike, which cannot be quantitatively determined and are in any case not cognitive elements of ability, also enter in as disturbing factors.

The raw material of music involves not only the element of pitch but the element of time. It is probable that we have some capacity for making temporal judgments through other senses than the ear: some people can accurately anticipate the flashes of a lighthouse beam, and we could probably judge intervals (of time not tone) by stabs of pain through the sense of touch; we certainly make precise judgments of time kinaesthetically by good timing in any form of athletics and most games of skill. Indeed so closely is the sense of time involved in all controlled bodily movements that many psychologists adopt the theory that the perception of time, even in music, is of a motor character. Seashore himself does not claim that judgments of time are the work of the ear to the same extent as are the sense of pitch and the sense of intensity, and he admits that perception of time is usually of a motor nature. Such a theory of the motor nature of temporal experience explains our perceptions of time and duration by incipient bodily movements and muscular strain, which in the last resort means a process in the brain and not in the ear. The fact remains however that the ear is the most sensitive organ for the apprehension of time and still more of rhythm—time being a matter of interval and duration, rhythm our

time is to group and organise temporal phenomena. The pure time sense is important to musicians since it is responsible for any-thing up to half of the idiosyncratic quality of musical interpretation. Composers do not need to detect extreme niceties of interval between one note and the next, the spacing of an arpeggio, the exact length of a tenuto, the synchronisation of a chord, but an executant does, and so does a listener if he is not to miss the finer points of interpretation in general and of phrasing in particular. It was found by the use of the test for time that individual variation in time sense is not so great as for pitch, fifty times instead of two hundred being the extreme difference in capacity between individuals. It also transpired that there is little correlation between a sense of pitch and a sense of time, a fact of great significance in discovering whether there is such a thing as a separate musical ability as such. We should expect to find if there was such a thing as a single God-given talent for music that pitch and time, both absolutely essential for good musicality, would be found together. No doubt they are among exceptional musicians, but the correlation is so low in a great mass of cases examined, both among children and adults, that a sense of pitch and a sense of time must be regarded as independent capacities. The sense of time in fact correlates more closely with general "brightness" i.e. intelligence, and may therefore have some connexion with the subject's personal "reaction-time." So we find ourselves back once more at general ability and the brain, without finding anything specifically aural to account for individual differences in their feeling for time and rhythm.

For in rhythm it is a common observation that individuals do differ enormously in their power to apprehend and to organise sounds into groups, which is what rhythm at bottom is. Early laboratory work† established that the subject's reaction to a stream of auditory impressions (to use the technical terminology for sounds that were in fact clicks in a telephone receiver) which were perfectly even in intensity, regular in their recurrent interval, indistinguishably alike in every particular, was to group them by accenting them. This subjective sense of rhythm by which the mind imposes an order upon a characterless flow of sounds is therefore a form of perception, even though it perceives something that isn't there, a contribution of the mind to the sensuous experience. The grouping is effected by means of accent. In reaching a rhythm so sensed the accent may be

† Bolton's Experiment. See my *Borderland of Music and Psychology*.

made by stress (i.e. dynamic increase of sound), duration (i.e. of accent) or pitch (as in some languages) or movement (i.e. of physical movement). It is upon the basis of this innate sense of subjective rhythm that the arts of poetry, music and dancing form their specific, objective rhythms : the composer in each art organises the grouping by means of stress, duration, pitch (or else in the dancing) for the ear and eye of his audience. The psychological purpose of something so innate in the constitution of the mind as to have earned for itself the erroneous designation of an instinct, is probably in the case of man concerted action. The indulgence of the rhythmic sense, if it is only kicking one's heels with dargling legs while sitting on the parapet of a bridge, yields an immediate and irrational pleasure that has all the marks of the gratification of instinct. These various characteristics of rhythm have been assembled in a definition by Seashore which runs as follows: "Rhythm is an instinctive disposition to group recurrent sense impressions vividly and with precision, mainly by time or intensity or both, in such a way as to derive pleasure and efficiency through the grouping."

Wider and less scientific definitions have been proposed, because there is something very pervasive about rhythm—it seems to run right through the universe and to be bound up with the very nature of time, which is mysterious enough in all conscience. Thus it has been called "the measured flow of movement" which has the merit of referring the word to its Greek derivation *peiv* to flow. A correspondent of mine suggested "a sequence of congruous patterns whether in sound, wallpaper, windswept corn or a mathematical series." This is perhaps to cast the net too wide and my own definition errs on the other side of not including enough: "Rhythm is our innate faculty for apprehending time." This fails to mention the nature of the apparatus by which we apprehend time, which is that of grouping; grouping is a method of organising sense material. The periodicity marked off by the group-accent is the essence of rhythm; time, at any rate in small quantities which is all we can directly and immediately apprehend without the intervention of the clock, is measured by periodicity. The period held in the mind is thus a norm against which variations can be set; from the tension set up between the norm of the periodic beat and the free play above it of deviations from the norm, come the arts of poetry and music. The freedom of the composer and the executant to vary their time schemes is only limited by the necessity of not destroying the norm in the mind of the listener. If he oversteps this limit with irregular-

is also cited in every performance of every work, and there are abundant instances, on a national as well as an individual scale, of singers who cannot keep time and of dancers who cannot keep movement. The two gifts are not easily correlated, for the reverse: Italians for instance who excel in variable execution of rhythm, and Hungarians owe the character of their songs to their rhythmic rather than their purely melodic quality. The latter fact explains why gypsy performers pull Hungarian tunes apart in order to exaggerate their melodic quality. Tempo rubato explains as neatly as anything could in a small way what happens in the artistic use of our native sense of rhythm. By virtue of our (subjective) sense of rhythm we can appreciate the niceties of a composer's temporal organisation of his *materia musica*, his pulse and our pulse are set to synchronise, but the performer intervenes and in the interest of melodic expressiveness makes a great many variations from the strict periodicity that is running in our heads. The common account of tempo rubato is that quite large deviations are permissible provided that over the total stretch of the piece no more time shall have been consumed than the mathematical product of the total number of measures each of a standard duration, or in other words, that the variations shall average out. This is an ethical conception based on the idea of robbery and repayment contained in the word "rubato" and has little relation to what actually happens. Considerable debts can be incurred without any attempt at repayment or anyone feeling any discomfort that compensation is not after all to be paid. It would seem to be enough if the norm is maintained with sufficient consistency to be felt as the standard against which the deviations can be felt as such. A deviation can only be felt as a deviation if it is felt as a deviation from something undeviating. The undeviating norm is the recurrent period which the mind can hold by its very precise if narrowly limited sense of time.† Performers must therefore play the game with their auditors, their rubato will be enjoyed as long as it does not strain the time structure; if in the supposed interests of emotional expression

† J. B. McEwen's *Tempo Rubato* describes some experiments that demolished the view that melodic vagaries could be justified by rectitude of behaviour in the bass. They showed further that the equal pulse is not in fact constant, but McEwen substitutes for equal pulse "time values which the mind will accept as equivalent," an important difference since it commits us to a purely subjective standard of time measurement, the span of attention, though it retains the idea of a norm of equality.

all sense of periodicity is destroyed the performance is unrhythmical. The essence of rhythm is the periodicity given by our sense of time, which is a form of perception.

2. MEMORY AND IMAGINATION

MEMORY is an indispensable ingredient in musicality. This does not mean that unless one can recall themes at will and play or sing more or less elaborate pieces of music by heart one is not musical, though a good memory of this kind is evidence of musical ability. Memory is fundamental because without it there could be no apprehension of music at all, since music flows forward in time and unless the end of a phrase could be related to its beginning there could be no apprehension of the tune as such. Musical structure depends almost entirely on recapitulation of material previously heard. A tune in ternary or rondo form recurs not for the sake of saying the same thing again but in order to unify the composition, to cut off a length of auditory experience from the flux of time and tie it up into a single parcel which the mind can deal with. To do that it must be recognisable, and to be recognisably the same as before it must have been retained in the mind from its previous occurrence, in a word remembered. Artistic unity thus depends on memory and memory is essential to music in a way not found in the plastic arts. The power of holding a fragment of tune in mind is therefore a kind of musical ability that can be tested. Seashore's test is to present two phrases of the same length and to ask which of the component notes is varied. There is nothing basically wrong with such a test, because if in a simple phrase the ear does not detect the displacement of a note, if the auditor cannot remember what he first heard immediately after, he cannot be very sensitive to sound. But the longer flights of memory like those of solo pianists, virtuoso conductors and operatic singers, which are so impressive to the lay mind, and that other unaccountable form of musical memory, absolute pitch, are not in themselves an invariable proof of musical ability. At any rate there are plenty of musical people who do not possess good musical memories, and many people who can play by ear, which presupposes memory, are quite inartistic. Memory and sight-reading are abilities rarely found together in the same musician. (Arnold Bax has testified to the early discovery in himself of the

ability to read anything at sight and recounts some of his exploits in public performance as a young man of music in the latter part of a modern idiom. Yet he can play nothing from memory. But there are other cases at the opposite end of the scale of ability. Mozart's exploit in Rome is classical: how he retained after a single hearing the whole of Allegri's nine-part *Missa*, which was kept secret from all but the Papal choir and was performed only twice a year on the Wednesday and Friday in Holy Week. This was in 1770 when at the age of 14 he noted the work after the Wednesday performance and corrected it on Friday. This is no doubt an exceptional case but it is by no means unique. There is for instance the case of Sir George Dyson who when a student at the Royal College of Music was playing timpani in the College orchestra, which was then conducted by Sir Charles Stanford. One afternoon after the run through of a new work by Stanford young Dyson came down from his drums and played the whole thing through on the piano.

The ultimate nature of memory, whether it is a mental or physical power, raises a philosophical issue. Psycho-physical interaction is the best working hypothesis in all such ultimately mysterious operations of our human nature. For the view that memory is psychical not physical the claim may be advanced that it is a better nucleus of personal identity than the body, which visibly changes so much in the course of a life-time as to make portraits of boy and man unidentifiable. While every cell of the body is discarded and renewed a man remains himself by virtue of the unity of his experience which only his memory holds together. On the other hand the hypothesis of neurograms, physical tracks in the grey matter of the brain, has much plausibility. If memories of sound were stored in physical tracks in the brain like the sounds stored in the sound-tracks of a gramophone record it would account for the rare but by no means unknown cases of what are called unconscious memory, by which illiterate persons are able in delirium or hypnosis to recite long extracts of the Homeric poems in the original Greek. The case of Professor Verrall's wife is classical, but a letter in *The Times* (January 30th, 1933) gave two other instances: one of a servant in a London hospital who recited Homer learned unconsciously from a poor scholar who had once lived the other side of a thin partition and had indulged in a daily practice of reciting Homer; the other quoted from Zinzinov's *Road to Oblivion* of an old Siberian woman who in delirium raved Homer which she had learned when servant

to a professor in St. Petersburg. A less abnormal case but still remarkable enough testimony to the peculiarity of auditory memory, is recorded (in *Unforgettable, Unforgotten*) of John Buchan's brother, Alastair, who knew the *Midsummer Night's Dream* almost by heart at the age of 5, and long before he could read could recite the *Jungle Book* stories word by word. The phenomena connected with senile decay, whereby recent events are not retained while far off episodes of childhood are recalled with a renewed freshness, is consistent with the view that the tissue of the brain has so far decayed as to be incapable of taking a durable impression on its top layer, although the deeper layers retain their impressions quite firmly until decay finally wastes all the centres which control conscious life. Without excluding a psychic element from memory it seems safe to assume some physical basis of brain tracks as its mechanism, in which case it is plausible to assume that all our experiences are conserved, though they are certainly not recoverable at will.

Retention, recall and reproduction are not then, one and the same thing but three distinguishable levels in the process which common speech indiscriminately labels memory. The power of memorisation or committing to memory is really learning, a primary and unanalysable act of mind (which is improved by practice). Of retention it might be argued that there can be no proof of retention if the mind cannot reproduce what is retained. But this is not so. Physical unfitness can paralyse the power of reproducing memories that are quite well founded and which become available on the recovery of health. I can myself testify to the distinction. I have very poor powers of reproducing music from memory: I cannot and never have been able to play on the piano anything from memory but I "know" a great deal of music in the sense that I can recognise and identify it and can compare its qualities with other music—I retain it in memory. But my power of recall works very slowly—one reason being, I think, that early musical habits established one-way tracks from the eye to the ear, which was confirmed later by the practice of reading at sight on which great stress was laid at that time and the neglect to play by ear (which was regarded as a kind of immorality) or to think back from sound to symbol. But though the power of recall is so poor as to be practically useless it nevertheless exists, as was shown by the following episode. I observed one day lying on my study floor a box of toy instruments which belonged to Haydn's Toy Symphony. As I looked at it I said to myself "Now how does that absurd symphony go?" But though I have heard

played in it and conducted it, I could not remember a single note, hum or whistle, any of the themes. Later in the day I was told that the whole affair had passed from my conscious memory, and I was "whistling" a tune, and on my waking up I recognised the tune as the first subject of the Tenth Symphony. I had therefore retained the memory perfectly, but I have lost the power of recalling musical memories at short notice or without summoning them at will. And I find as I grow older and do more and more music that the ability to identify and put a name to quite well known tunes gets slower and less reliable. How slow and difficult it has become was brought home to me with a shock when it took me three minutes and much conscious fumbling with associations of words and elusive images of times past and places forgotten to identify Handel's Largo played by a restaurant band in Trieste in the spring of 1946 among excerpts of Verdi and other such tit-bits of popular music. Memorisation, so as to play or sing from memory, requires not only retention but the power of immediate recall and the ability to reproduce music. Muscular memory (i.e. habit) is a help in reproduction. It is in fact an indispensable part of the learning process, for without it one would never be able to play a piece of music more quickly or correctly than at the first time one read it through at sight.

But such muscular memory is not enough without the over-riding guidance of the memory of the music's architecture. It is easy in letting the fingers wander idly over the noisy keys to find that they have taken a wrong turning in the development or recapitulation sections of a sonata or concerto and are leading back to the key of the dominant or the wrong bridge passage instead of heading for the tonic and home. Here the ordinary form of memory "what happens next?" comes in to help the player in the way he should go. He remembers that at this point the modulation takes such and such a turn, that he has to stretch a tenth in the left hand or, if he is using visual memory, that the vital F sharp in the melody comes at the top of the page after the turn-over. Nor is muscular memory absolutely essential to playing from memory, as the late Harold Samuel is said to have started playing a movement from one of Bach's Partitas in the wrong key and only became aware of the fact in the middle by finding the fingering unusually awkward.

The essence of musical memory, which will account for feats of remembering like those of Sir Thomas Beecham, who conducts an extensive repertory entirely by heart and has no fingering or other

muscular promptings to help it out, unless perhaps some visual memory of the printed page of the score, is *chant intérieur*. *Chant intérieur* is a term adopted by Vernon Lee for a mental process that has received little attention or investigation and still remains something of a mystery. It means not merely having a tune running in one's head but the ability to go over a piece of music mentally, to perform it silently to oneself. It is not merely a matter of memory but of imagination, by which a flow of music, one's own or another's, passes silently through the mind. Or if one reads a score in one's armchair the mental hearing of the music is *chant intérieur*. The phrase "to have in the mind's eye" is a good and common enough description of what we all recognise as a familiar mental habit; *chant intérieur* is the aural equivalent—it is the activity of the mind's ear. Memory, score-reading and imagination are music's most impressive powers, they represent musical ability of a high order, and at the heart of each of them is this mysterious capacity of silent hearing, to which composers (notably Schumann), theorists and conductors can abundantly testify. Examples of the way it works are the stories told of von Bülow and Hadow. Von Bülow going to give a piano recital in Bath wished to have something by an English composer which he could slip into his programme by way of compliment to his audience. On his way to Paddington he called in at a music shop and after looking through a number of pieces carried off something by Sterndale Bennett which he read through in the train and played from memory at the concert, thus depending entirely on *chant intérieur* for the process of learning. Sir Henry Hadow's feat is less spectacular because he probably used the piano in learning the new work. He gave a lecture on Parry's English Symphony to the Oxford University Musical Club at which he played it through on the piano by heart one Tuesday evening, though he had only received the manuscript score of a work he had never heard on the preceeding Sunday evening and had discharged the usual duties of a busy don on the Monday. But as an example of music remembered by *chant intérieur* it is striking enough.

Even more significant is the part it plays in the musical imagination. And here we leave the psychology of sound, the aural aspect of music which can to some slight extent be tested and measured, and come to something more elusive and vital to artistic experience.

IMAGINATION

MANY musicians have running in their heads a ceaseless flow of *chant intérieur*, of sound-images of every kind--tones, of their own or other men's making, rhythms and looser rhapsody. Schumann constantly refers in his letters to being full of music, of ideas which clothe themselves in melodies, of writing involuntary canons, of joyous inward singing. Elgar was referring to some such flow within when he said that the air without was teeming with music and you had only to reach out your hand and take what you wanted. The late Sir Hugh Allen who composed nothing but spent his life in the active practice of music and in the making of musicians, was made restless from an incessant mental flow of music in his head. Tchaikovsky's devastating industry, which allowed him no respite from composition except an equally compulsive urge to be on the move in foreign travel, was due to that wealth of sound-imagery which makes a man a creative musician. For though the ideomotor theory of action is not accepted nowadays by philosophers or psychologists it taught truly enough that ideas lodged in the mind are not static but are capable of moving men to action, and even in extreme and pathological cases to compulsive and involuntary action. The creative musician is at the mercy of his imagination, and if composers are not placid but excitable or irascible or changeable it is the imagination which keeps them perpetually at unrest.

What then is this imagination? Surely what it proclaims itself to be, the mental faculty we employ in dealing with images. And what is an image? An image is the recollection of a sensuous experience. Even in its vulgarest usage imagination is the manipulation of such remembered experiences. I myself have never eaten ice-cream in a hot bath, but if I propose it to you as my idea of bliss I shall say to you "Imagine it" and you will at once begin to enjoy images of taste and touch, i.e. sensuous recollections. Sir Joshua Reynolds may be cited as a witness to the connexion of imagination with memory: "Invention strictly speaking is little more than a new combination of those images which have previously been gathered and deposited in the memory; nothing can come of nothing; he who has laid up no material can produce no combinations." A musician is a man with an aptitude for collecting and playing with such images, only they will tend to be images of sound; his mind is full of bits of sound-stuff, motifs, melodies, timbres, rhythmic figures, all of them with life in them ready to sprout and grow, as the horn motif

at the beginning of Sibelius's fifth symphony grows an oboe shoot, which in its turn expands itself by its own inner impulse, and all of them ready to surge up on appropriate provocation. When they come into full consciousness as the result of a suitable stimulus, which may be no more than a commission to write a certain kind of work for such and such an occasion or may be a strong swift and sudden compulsion exerted by a poem that the composer is lucky enough to read, he knows what to do with them, for he has his technique and is accustomed to following a musical argument in just such a way as any one of us sets about writing a letter—the occasion calls for a letter, we know what we want to say, we have learned to spell and we can think grammatically in our own language—and the letter is written.

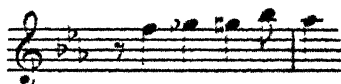
But images are capable of being used as symbols, and this is how music from being a pattern of tones becomes a language which can convey ideas and states of feeling. All of us use imagery in the process of thinking; all of us use symbols—the fundamental character of symbolical thought has already been discussed in the essay on Anthropology. A symbol is a means of representing to ourselves (and others) a rich mass of more or less loose ideas in a simple concrete image. All the metaphors which we use in conversation are symbols. Artists have the power of symbolising ideas in pregnant symbols in an exceptionally high degree. We make symbols out of the images which come and go in our minds. Most of us employ visual imagery and only make use to a less extent of auditory images of sound and still less of tastes and smells. But musicians tend with their *chant intérieur* to make more than ordinary use of sound images. Composers are like poets, fertile in using images as symbols of rich meanings. This imagery consists of the intervals, dissonances, progressions, in fact the raw material of music as already described. Since we all have this power of symbolizing to some extent we are all able to follow surprisingly well descriptive music of which the programme is not told us. How else should the listener recognise the symptoms of fever in the wisp of tune on the flute near the beginning of Strauss's *Tod und Verklärung*

Ex. 58



even down to the lazy feeling of being just caring about them to
 vast diffuses the memories which drift through the mind in a
 tired haze, and how else could he feel vicariously the
 the weakness of utter exhaustion conveyed in the balancing part
 that follows immediately on the oboe.

Ex. 59



The music conveys both the idea and its associated feelings. It might easily convey the feelings, for music is good at reproducing and transmitting states of feeling, but it also conveys the idea with extraordinary verisimilitude so that we recognise what it is that we are feeling and can put names to it.

Now every composer, being differently constituted chooses different arrangements of this audible imagery and shows his own nature by these fundamental acts of choice. We come to recognise his tricks of idiom as signs of his mind : of Beethoven the conjunct movement of his melodies, and in his last period the trills which certainly had some fairly definite significance for him , of Brahms on the other hand the arpeggio structure of his tunes and his partiality for mixed rhythms ; of Wagner the turn to express aspiration and his love of the tone of the clarinet ; of Verdi his strong accents on the obvious beats to propel his swinging vocal lines and his liking of the darker hues of stringed instruments ; of Mozart his feminine cadences and of Vaughan Williams his addiction to consecutive fifths in his basses. The ear picks up these tricks of style and others far more subtle so easily that one can often guess who the composer is even when one does not know or cannot remember the work in which they occur. Such idiomatic traits are like the differences in vocabulary, arrangement of words, punctuation, assonances and so on which differentiate one writer from another. They do not of course give an exhaustive account of the composer's or the writer's personality. For besides imagery and idioms there are in all substantial works of art ideas, almost, one might say, a programme.

Since there is here a major aesthetic issue, which has often been argued and is now, since the middle of the nineteenth century when it raged as the chief controversy in music, quiescent, though it has

not been and cannot from the nature of it be settled, it may be better to call evidence in support of it rather than argue it all over again.[†] Sir Donald Tovey and Mr. Constant Lambert are sufficiently diverse witnesses, neither of whom can be suspected of adherence to the school of gush in music. Tovey indeed might be expected to belong to the straiter sect of purists who proclaim that music means nothing beyond itself. But no : he sees that form implies content. "Every work of art,"[‡] he says, "from the most absolute of music to the most pantomimic of operas, selects its material in much the same way as an amoeba selects its food ; by simply coming into contact with it and extending itself around it. The amoeba has, I understand, also some capacity, mechanical or chemical (why not say artistic ?), for attracting suitable food before committing itself to indiscriminate contacts. Without going into inelegant detail, let us frankly use the word "digestion" as a technical term for the way in which the work of art treats its material." And later on "If there is anything which music certainly cannot digest, it is the imposition of *a priori* musical forms from outside." Lambert, protesting against the critical distinction so heavily emphasized at the time he wrote his book § between classicism, romanticism and neo-classicism, and against regarding formalism and emotional expression as opposed interests, blurts out the remark that "It may safely be said that the only classical music that is abstract is bad classical music." The purely abstract music may, according to Tovey, make an exercise or a puzzle but not music. Bach's *Art of Fugue* and Hindemith's *Ludus Tonalis* are examples of such abstract music which are exercises but not music, and the proof of it is that it is a matter of complete indifference whether you play any part of it loud or soft, crescendo or diminuendo, quick or slow (though this would hardly apply to Hindemith's pianistic Preludes)—it is music devoid of expression because there is in it nothing to express. In the early stages of instrumental music, such as for instance the fantasias and other formal pieces in the Fitzwilliam Virginal Book, where the composer was experimenting in the possibilities of the medium and of the sound-material, it is possible that there is nothing more than audile imagery to them, but in any work of art of size, substance and appeal

[†] I set out my views of the nature of music's subject-matters in my *Borderland of Music and Psychology* many years ago and I have not substantially changed them.

[‡] Denekle Lecture : *Musical Form and Matter*

§ *Musik Ho!*

there must be ideas as well.[†] How then do images and ideas meet?

How indeed? The answer to this question is the central mystery of creation. Any competent musician can design patterns of tones, but it is only the true composer who can say something with them, and he does so by an alchemy of the mind, the fundamental nature of which would seem to be a kind of analogy. By virtue of this is a concordant likeness between two kinds of experience. In our different sensory media a relationship is established running after for instance in the piano accompaniment of a song by Schubert. Here the nature of the analogy is not obscure; a river moves forward in time and space, musical tones move forward in time though not in space and the physical material of the two kinds of movement is different, yet music represents the movement of the water —there is an analogy between a ripple and an arpeggio. Other kinds of physical movement find expression in musical symbolism with equal ease and intelligibility. There is a neat example in Delibes's ballet *Coppélia*, where among the *divertissements* of the finale there is a dance depicting Work: two spinners carrying spindles and two reapers, carrying sickles make up a *pas de quatre*, which has an orchestral accompaniment of strings which spin and oboes which have a cutting figure. Analogy is after all one more instance of the mind's power of arriving at new knowledge by perceiving latent resemblances; it is akin to its tendency to symbolise: it is a root of poetry which is full of simile. Programme music contains many instances of subtle translations of pictures, of ideas, of stories into tones which carry their own explanation: think for instance of the third act of *La Bohème*, where the analogy conveys more than the simple rhythmic figure that sufficed Schubert to depict the comparatively simple image of a purling brook or the curl of a trout's tail in it. The scene of a wintry dawn is set in hollow chords of the fifth, with a double drone in the bass played pianissimo and tremolando and in the treble pizzicato notes descending gently like snowflakes. Frost is in the music as well as in the air. Yet not all pizzicato notes signify snowflakes; they might in some other context be tear-drops or perhaps the exordium of Elgar's cello concerto. But there they are

† Dr. C. S. Myers brings evidence from a psychologist: "Music," he says, "may give exquisite enjoyment, but in addition it has an inherent meaning, inexpressible in terms of spoken language or felt emotion — a meaning which becomes more and more clearly recognised, less affective and more intellectual in character, the higher the development of musical appreciation and of musical composition."

in Puccini, part of the apparatus of a romance that is so vivid that they turn into a picture.

Think of the most definitely authenticated instance of such a transformation from a classically inclined composer, whose mind ran equally to purely musical and to illustrative musical ideas, Mendelssohn standing on the shore of Iona and watching the waves come in conceived

Ex. 60



as the germ of the work which he was later to complete and call the "Hebrides" or "Fingal's Cave" Overture. In a letter to his family from Scotland in 1829 he says: "In order to make you understand how extraordinarily the place affected me, the following came into my mind there," and he jots down there and then on the paper the first twenty-one bars of the overture.

An instance of a transference of imagery between two artistic minds is provided by Laura Knight and Arnold Bax. Laura Knight records in *Oil Paint and Grease Paint* that her rock and sea pictures, appealed to Bax. "He sent me to hear his symphony of which rocks had been the inspiration: he thought there was a certain relation in our work. I saw my own rocks in his music that night." The case of Weber is also instructive, for in him the two kinds of imagery, visual and audible, existed side by side or in co-operation. He saw in musical shapes and composed under visual stimuli. In the novel on which he embarked, *Kunsterleben*, he says "With me everything must conform to musical shapes. The sight of a stretch of country is to me the performance of a piece of music . . . The scene moves in time. It is successive pleasure." Visual stimuli translated themselves into auditory images but not always like into like: the grotesque stimulus would result in solemn music, e.g. the upturned chairs of a beer-garden into the march in *Oberon*. The flow of music once started, visual impression appears by then to have pursued its independent way, and he could compose while carrying on a conversation, having as he himself expressed it—"if not two souls, two things in me, of which one is trained to deal with sounds and the other with conversation."

Some composers and some psychologists (Mr. Edmund Rubbra and Dr. Philip Vernon for instance) have expressed the view that

there is not a lot of audile imagery at large in the composition of music, though this conflicts with the testimony already cited of the prevalence of *chant intérieur*. But if a composer is not preoccupied with musical imagery as his chief mental furniture, he is not likely to have developed this mysterious faculty of translating "to music" whatever else enters and dwells in his mind, which is so clearly described by Weber for his own visual kind of imagination.

In so far then as music is a phenomenon of mind and not merely of ear the composer is perpetually translating ideas into images, aural images, for literature (including drama) alone of the arts deals directly with ideas as its material. Painters and composers must translate their ideas into other mediums. This translating process is common in every art, and by it one work of art can inspire the creation of another, as for instance in the ballet, *Job*, which is the last link of a chain that began with a Hebrew drama, was translated by William Blake into a series of engravings which were in turn translated into music by Vaughan Williams and into dance by Ninette de Valois. Now Blake is valuable to our enquiry because he is a rare example of an artist who pursued equally two different arts, poetry and drawing, poetry which is mainly idea and drawing which is mainly image. Critics of Blake have pointed out that the balance, which was at first evenly held, finally overturned because the image predominated. "He endeavoured constantly to treat the intellectual material of verse as if it could be moulded into sensuous form." Ultimately he failed and his poetry became incoherent. But, on the other hand his drawings, of which the illustrations to the Book of Job are a supreme example, became stronger and clearer.† "For," as the critic already quoted remarks, "this tendency to translate ideas into images, and to find for every thought, however simple or sublime, a precise and sensuous form, is the essence of pure artistic invention."

This view as applied to music was criticised, when I first propounded it, by a composer, who from the nature of the case speaks

† *Job*, incidentally provides in one of its small details a singularly clear example of the way in which a purely intellectual conception, namely the relation of good and evil, or God and Satan, can by the symbolising processes of sound, be given a sharper point. At the end of Satan's dance in Scene 2, trumpets blaze out the phrase "Gloria in excelsis Deo." Here the conceptual idea is conveyed by the age-old associations of tune and words. But the intellectual idea to be conveyed is one of irony, and so the trumpets are muted. The combination of muteds and *fizz* expresses the purely intellectual distinction between reality and mockery in purely tonal terms.

with first-hand authority. Mr. Edmund Rubbra made from the point of view of those who believe in absolute music a pertinent criticism. "Is it true," he asks, "that the composer is perpetually translating ideas into aural images? That he does so sometimes is beyond question, but surely in a large proportion of abstract music the idea *is* the music, that is to say, the world of much abstract music is completely autonomous. In other words image and idea are one." Samuel Alexander says something very like it: "the subject-matter has become the form of the tones themselves." But though it is easy to see that in absolute music the idea, the subject-matter, cannot always, or even very often, be isolated and identified as it can be in programme music, and that some such forcible reconciliation is an attractive hypothesis to account for one of the most elusive properties of pure chamber music, it is to me in the last resort untenable, because I cannot see how on this view good music can be distinguished from poor or indifferent music: if music is just music, then it is just music and that is all that can be said about it. Instead of pursuing the argument along the road of philosophy let us try the method of psychology.

Who of all men recently living had the most musical mind? For sheer musicality surely Rachmaninov. Yet he was far from being the greatest composer of his day. Apart from the fact that he united in his single person three musicians of the front rank, pianist, conductor, composer, he achieved both in his playing and in his music a quite exceptional musicality in the saturation of tone, in the enchantment of its sheer euphony. He had a copious flow of invention without strain or stint, his melody has an individual cut. His specifically musical gift can perhaps be seen at its best in *The Bells*, though the more familiar works for piano and orchestra show it well enough. *The Bells* has as its subject sleigh-bells, golden wedding bells and great church bells, which evoke in the composer not only the images which bells in themselves, evocative as they are, conjure up for all of us, but further bell-like images, on whose overtones he plays. There are ideas here as well as images, for the poet E. A. Poe provides him with a text, and some of these ideas are in fact so banal that they nearly wreck the work in the finale. But in the first two movements the ideas are strong enough to give body to the images. But if one considers a work like his second symphony or the cello sonata one sees why with all this imagination, with all his musical gifts, Rachmaninov is not a great composer. The musical stuff, the sound is splendid, but the ideas embodied in it are such as

to preclude the works from any claim to greatness : the profusion of tears, the overflow of self-pity, though doubtless sincere, betray the mediocrity of his mind (to say nothing of his character along the lines already considered in connection with music's relations with moral philosophy). The second piano concerto contains a good deal of the same sort of lyrical pathos, but the public's discernment that it is a great work is not far wrong, however uncongenial it may be to some austere tastes, for its psychological stuff is big stuff. It is in fact the catharsis of a moral and nervous crisis. Sabaneyev tells us more about this than the composer's published reminiscences, which naturally are reticent about the breakdown and its cure by the physician to whom the concerto is dedicated. The C sharp minor Prelude was similarly recognised by the intuitions of the general public as a significant piece of music, not only because of its very substantial musical merits, its sound-imagery and its strong design, but because it was clear without any of the apocryphal programmes attributed to it that it was the account of a man's struggle with himself or his difficulties. This strain runs through much of Rachmaninov's early output, but in the second piano concerto the struggle is fought out and the work has in consequence a certain strength. In the Paganini Rhapsody the idea is of less importance and the musical imagery, the ingenuity of the Variations and, again, the sheer euphony of it are its predominant qualities. But no one would call the composer great on the strength of any of these diverse works. They are likable but not admirable, strong in imagination, weak in ideas and subject-matter. Imagination then, which is essential, is also insufficient for the making of great music.

The ideas of music however are not the pure ideas of philosophical speculation ; they are the embodiments of and vehicles for states of feeling. One has to examine an operatic ensemble to see how a dramatic situation, the delineation of human character, the emotional temperature of half a dozen persons with indications of their motives, the quality and strength in minutest subtlety of their emotional reactions from moment to moment, can be conveyed in and by music. The words give us the clue and help us to identify all this content, this subject-matter of the music, but they are no more than identification tallies, the reality is in the music. So then in music without words an emotion derived from one of the composer's sentiments (complexes) may be stirred by events within or without his mind. As all feeling tends to discharge itself in some form of action, so this emotion will seize upon idea and image to

express itself in an intuition.† There can be little disputing that the subject-matter of most music is emotionally charged, but the intuition which is the formal element in which it is expressed is not itself, nor can be, an emotion, whether an immediate feeling from a sentiment, whether an instinctive impulse, whether recollected in tranquillity or however. But idea, emotion and image become one in the act of creation. Just why music can express emotion with such incredible fidelity is again a mystery, an alchemy of the mind; but plainly the dynamics of music, its speed as an analogue of its urgency, its tension somehow made manifest in extremes of pitch, all these properties of music afford a correspondence with the emotional experience. "La musique est pour ainsi dire la dynamomètre de la vie sentimentale" (Combarieu). So once more we have the symbolising, the analogy-drawing, the resemblance-seeking power of the mind as the primary mental factor in artistic creation.

Artistic creation then is a form of intuition—an immediate awareness of something new. It "occurs to" the composer just as ideas, we say, "occur to" all of us. He receives a sudden illumination. Most of the composers who answered a questionnaire submitted to them some years ago by a colleague of mine, the late Dunton Green, agreed that as a general description of the process of creation, as I have described it throughout these essays, it seemed to them right,‡ and it has the authority of Croce to back its philosophical respectability. We can get some corroboration from the sister art of poetry. In his famous lecture, "The Name and Nature of Poetry" A. E. Housman described what happened to him in the process of composition:

"Having drunk a pint of beer at luncheon—beer is a sedative to the brain, and my afternoons are the least intellectual portion of my day—I would go for a walk of two or three hours. As I went along, thinking of nothing in particular, only looking at things around me and following the progress of the seasons, there would flow into my mind with sudden and unaccountable emotion, sometimes a line or two of verse, sometimes a whole stanza at once, accompanied, not preceded, by a vague notion of the poem which they were destined to form part of. There would usually be a lull of

† I have dealt more fully with the relation of emotion to intuition in my *The Borderland of Music and Psychology*, where I propose that the artistic intuition is a judgement of value comparable to the action which Aristotle regarded as the conclusion of a practical syllogism.

‡ Their views were published by Chester in a little volume called *On Inspiration*.

an hour or so, then perhaps the spring would bubble up again When I got home I wrote them down, leaving gaps, and hoping that further inspiration might be forthcoming another day. Sometimes it was . . . but sometimes the poem had to be taken in hand and completed by the brain, which was apt to be a matter of trouble and anxiety."

Even if some allowance is made for the fact that Housman, who had a mind that delighted in intellectual mischief, could not resist the temptation of so imposing an occasion as an inaugural lecture to so serious an assembly as a body of graduates of the University of Cambridge to tease it with the suggestion that poetry is a matter of beer, the description must be accepted as valid since it can be confirmed by the experience of lesser mortals. It rings true. Observe in it that the poetry arose not from the surface of the mind which had been switched off by the draught of beer, but it welled up from conserved experiences as the result of some impact from the outer world. An active role must not be attributed to the beer any more than to the tobacco which some composers find is a help to composition. Its function is plain : to hold in check the inquisitive intellect for the moment when it is not wanted. The intellect gets to work later on. The stimulus to composition, which is no stimulus to but only the sedative of the intellect, may be something other than the physical narcotics of beer and tobacco. Bach used to clear his mind by playing other men's music as a start to the flow of his own improvisations. And Handel, if Professor Dent's most ingenious and probable and withal natural explanation of the famous plagiarisms be accepted, similarly had recourse to other men's music to facilitate the birth of his own. Some composers find that reading a chapter from a book will work the trick. In every case the image which clothes the idea and conveys the feeling bubbles up, in Housman's phrase, from the storehouse of the mind.

Let me summarize in a self-quotation the way in which I think it works, in so far as so elusive and so variable a phenomenon as artistic creation can be confined within a paragraph of psychological description :†

"The mind of a composer, like every other mind, consists to begin with of a number of instincts and an intellectual apparatus. The mind of man is no *tabula rasa* except in respect of knowledge of the outer world. In this it is, as Locke said, a bare sheet, until

† Op. cit. *On Inspiration*.

imagery of every kind has been written on it—visual, audile, tactile, ideational, brought to it through the senses. These images are the raw material of experience and they are immediately submitted to a process of assimilation by the innate powers of the mind. As a matter of practical working the mind has more than one department at different levels of consciousness. The subconscious part of a man's mind is at once the store-house of his experience and the source of his mental energy (derived from the instincts). Now what does the mind, so equipped, do when it creates a new creation? It is not scientific to believe that anything can be created out of nothing, however new strange or independent of the past it seems. *Ex nihilo nihil fit*. My answer is that the mind, receiving a new stimulus from the outer world of experience, performs an act of comparison of this new material with the experience already stored in the subconscious. All intuition seems to be of this character, and artistic creation is a special form of intuition. From the union of new and old something that never had a previous independent existence is born, just as a baby, a new individual, is created by the union of two pre-existing cells. An appropriate stimulus enters the artist's consciousness and penetrates to the deeper levels of the mind, where it finds memories, associations and analogies. An act of comparison takes place and causes to burst up into full consciousness a new intuition which represents the reaction of his whole personality to the new experience. One further factor is involved in the case of a musical creation and that is the power of symbolising in sound the intuitions which the mind makes. Symbolising is one of the fundamental powers of the human mind, and consists of substituting one image for another, usually one of simpler form but richer content for one of vaguer form with poorer content. By this power visual and ideational images may be converted into audile imagery, just as a poet may convert a visual image of a flower or an event into verbal imagery, or a painter convert an abstract idea into a visual image. Both the powers of intuition and symbol-making are common to all minds, but the artists and scientists (for in the last resort art and science are both exercises of the imagination in highly specialised forms) have exceptional powers of making intuitions. The sluggish mind cannot put two and two together; the genius sees that four is four before the indifferent mind has counted up the twos. The musician is an artist who has exceptional powers of making and understanding symbols in sound."

3. TEMPERAMENT AND PERSONALITY

So far the outcome of music's relations with psychology has been an indebtedness of the art to the science. Psychology has considered musical phenomena and reported on them ; it has offered the musician advice how he can most effectively practise his instrument, how he can cultivate his memory, how he can avoid misleading an orchestra, and though it has not told a composer how he is to write music nor penetrated that central mystery of imagination and inspiration it has investigated some of the mental processes involved. Without seeking to be practical it has clarified and classified musical experiences, and music has been the gainer. But there should be some repayment, by which music as one of the arts can throw light on the operations of the human mind : psychological knowledge for instance may be extended by an analysis of the artistic temperament. Psychological science has indeed received some acquisitions from music : experiments with rhythm have revealed the nature of man's sense of time, and such few revelations as musicians have made about their own mental processes, like that of Weber's visual imagination already quoted, contribute something to psychology. But, one might think, much more should surely be available. When a man writes music he reveals much of himself, he exposes his individuality in that he shows how sensibility, emotion, intellectual capacity are blended in him, and something of his subconscious mental life will also appear, whether in the form of emotional compensation, of instinctive purpose, or of buried memories. The artistic temperament causes many a practical difficulty of conduct in the ordinary affairs of life, it makes possible some of the most exalted experiences at a higher supramundane level, and it is always a source of interest to the study of personality. The abnormalities which have afflicted musicians, not merely the eccentricities of performers, but such serious states as the divided minds of Schumann and Warlock, the sexual inversion of Tchaikovsky, the hyperaesthesia of Chopin and the conflicts in Mahler, inevitably have an interest for the casual student of music, however little direct bearing they may seem to have on his appreciation and understanding of the music. But they should have more significance to the psychologist, not merely as additional entries in his case-book but as a contribution to the psychology of genius. Psychopathology has added much to the knowledge of normal psychology ; perhaps the neuroses, the abnormalities and the unbalance of musical genius can contribute

something to the knowledge of genius in health, though one has to be careful not to explain, still less explain away, the normal in terms of the diseased. We may for instance observe the presence in Brahms's music of masculine and feminine elements which remain rather obstinately differentiated and unreconciled, and we may take note that his sexual life was set on an abnormal course by his early experiences as a pianist in Hamburg haunts of low life. We may explain his growth of a beard in early middle life as a "masculine protest" against the feminine cast of his features and light voice. Perhaps the beard corresponded to some change in his glandular make-up† which turned him into a gruff and rough old man who still was fond of children. But physique, sexuality and music do in his case happen to show a correspondence. Neither need be explained in terms of the other, but the correspondence must not be ignored. The gruff leonine Brahms of the D minor piano concerto and the double concerto and of the tempestuous movements in the chamber music remains too distinct from the lyrical Brahms of the songs, of the violin sonatas in G and A and of the singing second subjects, to be as easily reconciled and united as are the male and female elements in most of us. But where such a unification is effected, as in the D minor violin sonata, the first and second symphonies (with the male uppermost in the C minor and the female in the D major symphony) the breadth of human experience so encompassed is correspondingly greater.

Much greater is the divergence of the two personalities found in Schumann. So much greater in fact that reconciliation of the two elements, which also might be called male and female though less obviously than in the case of Brahms—the division is not so simple and is more in the nature of alternating personalities—was not accomplished, but instead developed into a conflict so acute as to

† His physical history is certainly curious: in youth he was more girl than boy. At twenty he was still slender but more masculine. His voice, countenance and eyes were distinctly feminine; manner, thought and energy distinctly masculine. At thirty-two he developed into a short square figure, and in early forties he grew a beard perhaps to conceal the protruding underlip. His renunciation of marriage, a question which has been debated from every angle, is usually explained as a choice between devotion to a woman and devotion to art, and is probably right since it corresponds to Brahms's terror of being tied to anything, a job, a choir or a person. But the division in his personality went deep and is discussed by Geiringer, (*Brahms and his Work*) who however rejects the Freudian interpretation put upon Brahms's habit of raising his eyes to women of strong all-round attractiveness, looking and then running away. The "Oedipus complex" on the whole seems too simple an explanation.

destroy the composer's reason. Schumann began life as a gay romantic, the type of the hero of a novel. He was full of high spirits, pranks, fun and extravagance. This side of himself he called Florestan. There was, however, the dreamy side which he named Eusebius. These names he employed as pseudonyms with which he signed his critiques in the *Neue Zeitschrift für Musik*, and as titles for pieces of music in the "Carnaval" suite. Florestan was comparatively extrovert and took in the life of the world around him, which, as he explained in a letter to Clara, soon became transformed into music. The dreamer Eusebius was more introspective and so far lost hold of reality that, when in later life this personality had dominated the other, he became incapable of even the ordinary musical activity of conducting an orchestra. His failure at Düsseldorf was thus a stage of the disease which drove him to attempted suicide and death in an asylum. Florestan became completely repressed and Eusebius was not capable of dealing with the business of living. How far Clara was responsible for precipitating the change is debatable. The good and devoted wife can be too much of a good thing, and many a good man has been driven in on himself to silence and repression by the too active goodness of a devoted woman. But whatever her unwitting responsibility, his dual personality split and overbalanced, and the change in him was accompanied by a parallel change in his music.† In purely musical terms the change towards classicism is usually explained by his admiration for Mendelssohn, and Mendelssohn certainly provided a model of the way a composer with a predominantly classical mind is to write in a romantic era music founded on a programme, music breathing the romantic spirit of the time. The best of Schumann's music is the early work, which exhales the pure romantic spirit, ebullient, picturesque, warm and tender, moody and fanciful. The later music which in intention and effect is classical is dull, for whatever incongruous elements are contained in his personality classicism is not one of them. But though Mendelssohn may have been the model, the trend towards classicism is parallel with the change going on in his personality. Exterior causes, in the shape of heredity, glandular make-up, disease of the brain, would no doubt have to come into the account, but so far as psychology goes the split personality and the accompanying musical differences form a complete story.

† I owe this observation to Miss Joan Chissell, who develops the theme in her biography of Schumann (in Dent's *Master Musicians*).

In cases of divided personality like Schumann's it is common to find that the man himself recognises the presence of two persons in the single body. Fiona Macleod the writer wrote letters to his other self William Sharp the journalist : Dear Fiona was addressed by Yours sincerely William. Florestan and Eusebius lived equally happily together for many years till the final parting came in disaster. Disaster and suicide were likewise the fate of Peter Warlock the composer who was in private life Philip Heseltine. Here the division was complicated by a further division running across both personalities. The complete account can be read in Cecil Gray's biography of the friend whom he knew more intimately than any one else. Its essence was a man of extreme sensibility adopting a mask by way of protection against the otherwise intolerable impingement of a world of which he was not master. Peter Warlock was therefore a creature of Philip Heseltine for purposes of defence—a defence mechanism in the familiar psychological phrase, but an unusually bold and complete and elaborate fortification, of which the first outwork was the growth of a beard. As with Brahms the beard was at once a symbol and source of increased masculinity. The public only knew of the two personalities as a device, comparable to that of the assumption of a pseudonym, for distinguishing two kinds of work. Philip Heseltine was a critic, and editor of music, an apostle and evangelist of Delius, a literary man, the editor of a periodical. Peter Warlock on the other hand was a creative musician who wrote splendid songs. But it later became apparent that within Peter Warlock the composer were two personalities, which again could be designated male and female, though tender and tough, sensitive and aggressive, reflective and roystering, are better descriptive adjectives. The tender or Heseltine side of the composer wrote exquisite lyrics, and the Christmas carols "Balulalow" and "Tyrley tyrlow" are among the best carols of the revival, yet their author loathed Christmas ; the tough Warlock wrote the drinking songs and "Peterisms" containing "Rutterkin," "Roister Doister," "Lusty Juventus." There are in Warlock's output works in which the two sides are reconciled, as they are in the ordinary lives of normal men—we all have our tender moments, reflective moods, times of despondent introspection and other times when we are energetic, forward and outward-looking, provocative maybe, and any composer must be able to encompass so much of ordinary human experience even if only in the form of inclining the balance of his music now towards melody now towards rhythm, to be able

to offset a first subject with a sufficiently contrasted second subject. But when the two sides cease to co-operate, as in the three composers whose alternating personalities in an increasing scale of dissociation I have been observing, the normal becomes the abnormal, the healthy range of mood becomes the psychopathological divorce of personality. Gray in his biography traces the degree in which the two composers in Heseltine-Warlock were severally or jointly responsible for individual compositions. The "Capriol" suite is a complete success, partly because it is a joint effort, with Warlock in the ascendant in the final number just to round off the dances with a high kick. He also points out that the Elizabethans showed a kind of life in which the tender and fiery impulses were combined at high tension, and that Warlock before the tension burnt him out was an Elizabethan born out of time. But once Philip Heseltine had started Peter Warlock on his independent career the division became more than a Jekyll and Hyde affair. Gray describes† their clash as "a deadly conflict which came to be waged on every psychological front. The critic fought against the artist in him, the Elizabethan against the modern and the mediaeval against both, the internationally minded pacifist with his private Cornish language against the bellicose and insular Englishman, the cultured and exquisitely refined aesthete against the beer-swilling pub-crawler, the mystic and the occultist against the cynical blasphemer; and the struggle became fiercer and more intensified as the years went on in a gradual inexorable crescendo."

The strands in Warlock's musical style are almost as complex though not so mysterious. The Elizabethans whom he studied, an echo of folk-song and the powerful influence of Delius are somehow combined in an unmistakably English talent, which developed from them an individuality of its own. The impact on it of the psychological cyclone which raged within the same breast, once it is understood, makes criticism of the music easier, and conversely any alienist, if he understood it, would find in the music a clue to the tangled mind of the composer. Man, mind and music, even in so pathological a case, where tastes in food and drink followed the lines of the division in the personality, are three aspects of a single vital phenomenon. At one time in the heyday of psychoanalysis great works of literature were subjected to the process of analytical psychology partly as an adjunct to literary criticism, partly as

† *Peter Warlock*. Jonathan Cape. 1934. p. 234.

studies in applied psychology. Literature is an easier field than music for this kind of study because it is less esoteric than music. The language of music must to some extent be learned by the analyst before he can begin his studies of it. But music, like painting, might be no less productive than literature, and although I should not myself claim results of any very great value for these psycho-aesthetic studies—the painting of Picasso, notably in his later developments, offers a parallel attempt to explore the psychology of art—they are worth pursuing as a matter of scientific curiosity and in the hope, to be realised in greater or lesser degree or ultimately disproved and discredited, that they may enlarge our knowledge of the capacities of the human mind. In music a certain quantity of data is available, though probably not enough to proceed to any generalisation or even for preliminary classification, so that these somewhat superficial examinations are not claimed to be worth while except as preliminary explorations in psychological criticism.

From such extreme abnormalities as divided personalities the enquiry can profitably be turned to the less abnormal instances of artistic temperament. It is possible that the artistic temperament can be better studied in executants than in composers of music. For the essence of so razor-edged a thing as musical performance is the element of time : the note has to be sounded at such and such an instant of time exact to the fraction of a second or it is wrong. It has also to be sounded at the right degree of intensity, which means an extremity of nervous control and muscular response. It has also to be uttered before an audience which enhances the feeling of responsibility. It is in short a nerve-racking business. Unless the performer has sensibility, unless he has a sixth sense, mounted on special antennae of the mind, to feel rapport with his audience, unless he has an acute sense of sound, he cannot hope to excel as a practical musician. If he has all these qualities he is unlikely to be phlegmatic, patient, sober in demeanour, equable in temper. He will in a word soon develop an "artistic temperament," if he has not one to start with. Possibly then a musician like Paganini would provide the best material for a study of artistic temperament or living artists, who could not, however, be named without defamatory libel. Paderewski, on the other hand, though a great executant, offers an example not of the artistic temperament as usually understood, but rather of the contrary since he reconciled two elements which in the purely artistic type are usually antithetical,

namely a high degree of sensibility (which usually involves some degree of emotional instability) and the practice of good citizenship. The artistic temperament will work, but by fits and starts with brief though intense concentration. Paderweski, however, was a life-long worker who left nothing to the inspiration of the moment, and by his sheer pertinacity, constancy to patriotic ideals (he put his country before his art, according to his own confession†) and stability of ideals and character became both an internationally famous pianist and the head of the Polish state. And by a further exercise of wisdom, a quality again in which artists are notably defective, he knew when to withdraw from affairs of state and to return to the piano. If his life shows anything it is that an artistic temperament is not necessary to excellence in art.

Temperament has been explained, by a psychologist so little materialistic in creed as McDougall, as the resultant of the physical forces that play upon a man's mental life. In particular the secretions of the endocrine glands are extremely important. Indeed at one time endocrinology threatened to become the master science and surgery of the glands to usurp the place of morals in the determination of character. A man's character, it was said, is the algebraic sum of his glandular secretions. The careers of many great men and women were interpreted no longer in terms of an Oedipus complex but of the life history of a gland and its juices. Napoleon's defeat was due to a failure of pituitary, Henry VIII's more tranquil years to a deficiency in thyroid, Florence Nightingale's career was the hyperfunctioning and decline of pituitary and thyroid. The discovery of the functions of these important organs of the body led, as did the similar discovery of the unconscious in psychology, to excessive claims and over-simplification. In the case of the glands, which were said to exercise control of, and indeed to determine, the personality by an "interlocking directorate," the question what determines the activity of the glands themselves (*quis custodiet ipsos custodes?*) was fatal to the view that we are simply a bundle of chemical reactions, for it was admitted that emotional factors could affect the functioning of the glands. Repeated fear would make overdrafts on the adrenal gland and cause excess of activity in the thyroid. And what, one may ask, caused Napoleon's pituitary to fail?

But the nervous system and the brain are affected by chemical

† "La patrie avant tout, l'art ensuite."

secretions and our physical constitution does have an influence on our psychological make-up. The common association of red hair with quick temper, corpulence with lethargy, sensuality with a full mouth and other such correspondences noted by the observant over countless generations of men, are testimony to the basic fact that physical and psychical features are concomitant and the mechanism of their concomitance is certainly the glandular system. No one has yet worked out any correspondences between composers of similar physical type producing music of similar character and quality—red hair has not been shown to go with six-eight time, large feet with wide-ranging melody. I have suggested in my anthropological essay the possibility of a beginning of some such technical classification according to racial inheritance, but when it comes to individual musicians it is not even possible to begin to classify them by physical type. Composers have not yet been grouped into the short and the tall. So that there is a long way to go before music can be chemically judged or surgically controlled. But some preliminary sorting has to be done, and we do it by differentiating men according to personality, temperament, disposition, temper and character. Humpty Dumpty in his famous interview with Alice complained that all humans were alike, their faces were built according to the same blue-print, in which, as he indicated with his thumb, eyes, nose and mouth are arranged in the same pattern. We ought indeed to be indistinguishably alike because we are equipped with the same bodily organs and physical constituents, the same equipment of basic instincts, the same mental machinery. Yet we are in fact infinitely various. One face is pretty, another plain ; one man is fierce, another mild ; one mind is quick-witted, another obtuse. And the differences lie, as in puddings so with men, in the quantitative values of the ingredients. Temperament then is the physical basis of man's personality, his disposition is the instinctive basis—is he self-assertive, over-sexed, irascible, curious ? His temper is, in McDougall's phrase, "the expression of the way in which the conative impulses work within him," whether he is persistent, eager and urgent, affected by obstacles and deterrents. What this depends on Heaven knows, but it is perhaps the most constant feature of the personality—as a man begins so he continues through life in this matter of the will. Will itself defies psychological analysis, though it has been related to the sentiment of the self, (or in another terminology the ego complex) by some psychologists. It is an ultimate of human nature. Char-

acter is what a man makes with this native endowment of the raw material of his life's experience. His personality is the resultant sum total of all—mind, body, circumstance, character. And it is the analysis of personality that endlessly interests human kind and causes the writing of biography and fiction. The art of musicians offers one extra instrument for such analysis.

Little work seems to have been done on the artistic temperament by psychologists. It is no doubt a vulgar rather than a professional category among human types. It is however a recognisable phenomenon and its currency in normal speech testifies to its reality—for once more I affirm my view that what is stable and wide-spread in common speech is thereby guaranteed a measure of reality that demands philosophical consideration. The case of Paderewski has already suggested that an artistic temperament, as ordinarily understood, is not an essential for artistic creation. Handel and Haydn were not temperamental. Gluck was a patient and equable man, though the effects of composition prostrated him (every opera "commonly cost him a year and oftener than not a serious illness"). Bach was quick-tempered, but he was essentially the sober craftsman and not the romantic artist. In fact it might be argued that the artistic temperament was a nineteenth century creation with Berlioz as its pioneer among composers. But the basic improbability of any such sudden development in human psychology is converted into refutation by the discovery of temperamental composers before the admitted change from the craft attitude to the art attitude of composers to their music—not to mention the Renaissance painters and the Elizabethan poets. Dowland had the melancholy and the defects of character commonly associated with the artistic temperament. Mozart and possibly (though the evidence is small) Purcell had some of the weakness of will that is found in the more easy-going type of artist.

Inconstancy of will, at any rate in matters outside the direct creative activity, lack of perseverance and a certain emotional fickleness, which come under "temper," is a fairly constant feature of the artistic temperament, though the most dogged feat in human history is provided by Wagner's twenty-nine years spent on the composition of *The Ring*. It is, however, rather in practical than in artistic matters that the temperament shows itself. Allied to this is the levity and irresponsibility with which moral and economic obligation sits on the artist, whose sense of social values shows a corresponding variation from that of the ordinary educated citizen.

Indeed citizenship and artistry are not easily combined in the same individual. Freud accounts for this by attributing art to the early developed pleasure principle and practical life to the reality principle, which he postulates in human development. However explained, it would seem that artistic temperament and public spirited citizenship belong to antithetical types. The artist is not, however, wholly selfish. Rather the artistic temperament shows itself in alternations of egotism and absorption in things outside the self, including generosity. In matters of art, however, artists find it almost impossible to take detached views. Art for them means their art, and the limelight that beats upon the dramatic and musical professions fosters this egocentricity. A similar preoccupation with what is nearest is the tendency to ignore past and future and live in the present. The executant musician has plenty of excuse for this, even if he does have to book his engagements ahead, since the essence of his art is to seize the passing moment at the top of his form. On the other hand he does often say he is not in the mood, and he has to learn to go through with his performance in good condition or in bad. He is not usually, however, a very provident person and the past only becomes important to him when he sits down to write his memoirs.

The strongest characteristic, however, is the highly developed sensibility, which tends to emotional instability. Sensibility leads easily to irritability. Artists are "emotional" in the sense that their feelings are easily aroused and blow off at a lower pressure than those of ordinary mortals. They are therefore often moody—a mood being the over-hang of an emotion. This constitutional excitability is the feature most commonly recognised in vulgar parlance as the sign of the artistic temperament *par excellence*.

This impulsiveness and excitability characterise Berlioz, though no one could accuse him of instability of purpose or of feeling, nor of irresponsibility in the ordinary affairs of life. Of the women in his life he loved them all and was constant in his affection to them, even if he had to part from Harriet and regretted Marie's tenacity. He fell in love with a pair of pink slippers and fifty years later sought out their owner and corresponded with Estelle for the rest of his life. He never ceased to love his first wife even after they had parted. He made a living under difficulties but was never defeated by the comparative apathy of the French public to his music, and he enjoyed his triumphs abroad. But of his exceptional emotional excitability there can be no doubt. His extravagance of language,

itself a part of his sensibility, cannot conceal the violence of the impact made on him by his experience of the dissecting room of his student days, of his first experience of Shakespeare, of Beethoven, and in still another direction of being jilted by Camille Moke. Berlioz was indeed an eccentric (as Glinka said), a living extravaganza, and his music is a reflection of his personality. The extreme sensibility to sound, shown alike in his scores and in his *Treatise of Orchestration* must not be discredited because he could apparently stand a quantity of sound that might have wearied a sensitive ear. The sound is in fact always translucent and therefore less cloying than the heavier saturation of Wagner. And things like the "Dance of Sylphs" in *Faust*, the "Queen Mab" scherzo in *Romeo and Juliet*, and the nocturne in *Beatrice and Benedict* show his extraordinary sensibility just as much as the raging and tearing of the "Symphonie Fantastique" show his emotional excitability. His prose is extravagant to the point of untruthfulness. He had a streak of melancholia which grew on him in his later years—this is less apparent in his music, though the stuff of his music is just precisely mood painting. Of his nature music, "the Scène aux Champs" of the *Symphonie Fantastique* for instance and the nocturne in *Beatrice and Benedict*, it can be said more truly than of Beethoven's Pastoral Symphony that it is more feeling than painting. He did in fact translate everything into terms of mood and feeling, and this accounts for the curious trait which he shares with Bach, that often his music was prompted by the external world, for which he was impelled to find an expression in sound, yet once the translation is made he has no difficulty at all in transferring it bodily to some other programme or situation requiring musical delineation. The "Marche aux Supplices" comes from the early unfinished opera *Les Francs-Juges*, the *Carnaval Romain* overture from scenes in *Benvenuto Cellini* (an understandable transference hardly requiring excuse or explanation), "Tuba Mirum" in the *Requiem* from the cantata *Resurrexit*. The general criticism (by admirers of Berlioz's music) is that it is unequal—banality will succeed heavenly inspiration, and there is something of hit and miss about his music which corresponds to the erratic ups and downs of his stormy life. But one point of conflict may be noted because it is paralleled in Schumann and Mendelssohn. Mr. J. H. Elliot,† one of his English biographers, traces in the music a progress from the romantic to the

† *Music and Letters*. April 1936.

classical, the pivotal point being *Romeo and Juliet*. Berlioz on this view was like Mendelssohn, a classic born into a romantic period and some of the unbalance in the music can be attributed to this. Berlioz is indeed the supreme example of the unbalanced musician.

Two musicians who belong to the *fin de siècle* literally and in the broader sense of the autumnal decline of the romantic period are Mahler (1860-1911) and Busoni (1866-1924), whose lives and work reflect the distractions of their minds, which seem to have been caused at any rate in part by social circumstance. Breeding, or rather lack of it, accounted for many of the troubles that Mahler created for himself, and he wore himself out by the excessive expenditure of nervous energy upon his work as a conductor of opera. But behind and beyond these more or less ponderable factors is to be detected a spiritual malaise. Mahler was born a Jew and died a Catholic; he had a rough upbringing and a successful career; he inherited from a pedlar grandmother an indomitable energy and determination, which enabled him to build up the Vienna Opera during the ten years he ruled it to a hitherto unattained glory of achievement, but he created such internal discord in the process that he had to relinquish the post. A passionate nature, acute sensibility, and a ruthless will constitute a psychological endowment such as the ideal artist would covet for himself, but they do not make for a harmonious personality. Mahler was in fact schizophrenic, in that the cleavage between his ego and the real world was chronic; he never reconciled them as a more eupeptic composer, his contemporary Richard Strauss, adjusted his personality to the world. Mahler imposed himself on the world with a ruthlessness almost equal to that of Wagner's in the realm of performance. He withdrew from the world physically in the summer to seek the solitude of his country home above the Wörthersee and there he retired into himself in composition, writing his enormous symphonies in which he gave rein to his other-worldly dreams. In a letter he speaks of his execrable duties at the theatre as the treadmill from which he longs to escape. But when he did leave it his active self demanded satisfaction once more and off he went to America to conduct. Thus composition and conducting alternated with him not merely because of financial necessity and the Viennese way of dividing the year into two, but because his own mind was divided into two.

All his music in consequence was a product of the escape-withdrawal side of his nature and is an expression of a desire for peace of mind. In the early symphonies he sought for it in nature, in the

fourth in childhood, from the fifth to the seventh he battled through stress and a restless search to find some habitation for his soul in the universe. It would not be right to call this search philosophical or religious, it is too aimless and eclectic, but it issued in the eighth symphony in a concentration upon the words of "Veni Creator spiritus" and a more resigned mood in the ninth symphony. In the *Lied von der Erde* where he turns for text to the eastern mysticism of China there is some sort of resolution of the stress in a reconciliation of the soul and nature, but the pantheism is tinged with the sadness of resignation—the peace achieved is that of renunciation rather than achievement (such as Mahler had experienced in worldly affairs) or a will to fuller life. Mahler employed gigantically inflated forms for the expression of this turbulent amalgam of thought, feeling and aspiration, which are not justified even by the magnitude of the subject-matter. But perhaps the subject-matter too was inflated by his emotionalism, for he expressed more truly what he had to say in songs. He needed words (on his own confession) to crystallize his musical ideas and he found in *Des Knaben Wunderhorn* and in *Kindertotenlieder* the brief lyrical expression of what his restless spirit sought. *Das Lied von der Erde*, the best of his symphonic works, is held within bounds by its song texts, and in their exoticism he found a haven of the peace he constantly sought and as constantly fled. The fact that elsewhere he cannot pack his matter into the form, that his emotionalism distends the form of the symphony intolerably, is a sign of the distraught mind, aware of life's issues but unable to grasp them in acts of artistic creation strong enough to withstand the internal stresses.

Mahler's music, if not great in the way that his predecessors of the Viennese school which came to an end in him were great, has a recognisable character of its own, even if the idioms are not so definite as those of Beethoven, Schubert, Brahms, or even Strauss. Busoni's music on the other hand, however accomplished, has no place in any repertory. It has intellectual worth, sincerity and supreme competence, but because it has no individuality we hear none of it. Even the best of it is the work of a great musician rather than a great composer. Busoni looked at one time as though he was the man destined to lead music from the impasse to which it had come at the end of the nineteenth century by the apparent exhaustion of the major-minor key system after three centuries of intensive employment. He had the big mind for the task, the forward look and sufficient determination. Yet he failed to achieve it, failed to

make his own music live, and is remembered only as a master pianist (thus corresponding in fame and accomplishment to Mahler's triumphs as a conductor). And the cause of the failure seems to have been distraction. He was born out of place and out of time. He was by birth an Italian but was German by temperament and mental outlook : he was born in Tuscany and died in Berlin. He was brought up in the romantic musical idiom of the nineteenth century but thought the thoughts of the twentieth. He was torn not only geographically but musically, for in him the claims of composition and performance were not adjusted so well as in Mahler's case, though he left a sufficiently substantial corpus of compositions running to seventy opus numbers. His biographer, Professor Dent, finds the clue to his life in a psychological sequence of seeking out and experiencing everything, discarding it and seeking a new beginning. This was what in literal fact he did with his recital repertory of piano music. But if a man sheds too much, he sheds something of himself with it. Busoni with his incessant travels had no roots of residence or of nationality ; his virtuoso's career made him a cosmopolitan, so that when the first European War precipitated Europe into three camps, Allied, German and Neutral, he took himself to Switzerland, and though he found its international atmosphere not uncongenial it revealed to him his own lack of roots ; on his return to a strange Berlin after the war he found himself held in higher esteem than before the deluge, but the deluge had changed the world, and the new music to which Busoni had devoted himself was side-tracked by the still newer, anti-romantic music of the post-war period. These larger movements of taste arising out of political circumstance ought not to have disconcerted a man whose constant search was for new beginnings. Maybe he died too soon, for the world had hardly settled down by 1924 and the experimentation of the 'twenties had only just begun, though it may be doubted whether he would have done more than watch with a sympathetic eye the experiments that filled that decade. The experimentalists at any rate did nothing more for him than complete and perform his opera *Doktor Faustus*, and less and less has been heard of his work. This is not conclusive evidence that no more will be heard of it, but the general impression left by reading Dent's most sympathetic biography is that the achievements of this great man have somehow gone to ashes, and his successful and happy life (for he was very happily married) seems in retrospect to have been one of dissipated effort and frustration. I am not pretending

that this superficial summary is a complete account of all that Busoni did for music—his teaching of the piano still survives in a distinctive tradition—but I am proposing that Busoni and Mahler were men of great endowments, who had not much the matter with them psychologically in the beginning, but had certain damage inflicted on their artistic and highly strung temperaments by the circumstances of their lives, which tended to tear apart the integration that they themselves spent endless pains to accomplish. To neither of them came the normal story-book trials of poverty and lack of recognition—if neither of them was accepted as a great composer by their contemporaries that is no more than their due, for they were not great composers, though the truth of a judgment does not make it pleasant to the subject of the judgment. Both were successful in worldly matters of money and society, both had happy family lives and both won fame as artists. They were not Mozarts dying poor and slighted, nor even Schuberts dying poor and with a sudden realisation that life has to be grasped and steered if it is not to go on the rocks. But they were figures whose careers seem in retrospect to have an element of tragedy in them, and the reason seems to have been an incurable internal disharmony that arose from external circumstance. They are cases in which heredity and environment, psychological and sociological factors have an immediate bearing on their music, of which criticism must take account.

If mental distraction is the source of abnormality in Mahler and frustration in Busoni, a deeper abnormality with more startling results and an equally early death from a too intense burning out of the spirit is to be found in Tchaikovsky, in whom the root of the trouble was sexual inversion. Biography and criticism have been kept in his case rigidly separated perhaps because it is only recently that it has become possible to discuss homosexuality without embarrassment. The latest and most complete biography† sticks rigidly to facts—it does not shun the forbidden topic—but it does shun musical and aesthetic issues except in passing. The time, however, is ripe for a revaluation of Tchaikovsky based on a resifting of his formidably large output, for an attempt to see him whole by a combination of criticism and psychology, and for breaking the narrow obsession, which the public has come to share with the composer himself, with morbid self-indulgence in the pathetic emotions. As a first step the facts of his emotional life, which are

† By Herbert Weinstock 1946.

in themselves sufficiently extraordinary as to be worthy of an alienist's case book can be tabulated: an abnormal sensibility from his earliest childhood, emotional fixation on his mother caused by her death in his early youth, a consequent inversion of the sexual impulse, the incredible marriage which arose out of an attempt to achieve normal sex-life, its catastrophic failure, and the curious epistolary friendship with Nadezhda von Meck. The deep love for his family, especially for his sister who married Lyov Davidov and for his brother Modeste, his liking of children, the long-abiding attachment to his governess and to his first love, Désirée Artôt, are not in the least abnormal, but they complete the account of the emotional life of a man who did not know how to dispose of his rich fund of affectionate feelings. Psychologists may use all these as data for their examination of the man Peter Ilyich Tchaikovsky, but the man was also a musician, and as such had other psychological peculiarities, the chief of which was a compulsion to compose almost without cessation. He stopped composing only when he was either travelling or when he was correcting proofs or teaching (in the early part of his career) or concert conducting (in the later part). He was sociable to the point of seeking the company of his fellow-musicians, but he was too restless to make a proper home for himself and relied on the Davidovs for domesticity. His daemon drove him either to physical locomotion or to covering music paper with an unending stream of notes. It is possible that the guilt complex from which he suffered as a result of his homosexuality was an additional incitement to activity as a cure for introspection. Many musicians have a ceaseless flow of music running in their heads, *chant intérieur* of all kinds, and it predisposes them to activity. Yet art, a kind of action, has as its purpose contemplation and at some stage in the creation of a work of art the artist must stand back and contemplate his own vision. Even a pianist as he plays must listen to his own playing. There is, in fact, an active and a passive element in artistic creation, and it is the passive or contemplative element that is responsible for all that sifting and selection which constitute the artist's self-criticism, his taste and his decision to put his signature to what the world is going to see or hear as his authentic creation. The final act in the creative process is one of contemplation. Tchaikovsky was no worse but rather better than most composers in self-criticism. Like most he was inclined to regard each work as it came as the best he had done so far, and was frequently subject, therefore, to disappointment at the failures of his

operas. Again like many others, he concentrated most labour on, wished most for success in, and was inclined to exaggerate his powers in, just that kind of work for which he had least natural talent—in his case, opera, the most tricky of all forms of music. But he was often shrewd, and his ability to detect the rhetoric, which is next door to insincerity, in the fifth symphony, as compared with the fourth wherein the same notion of fate suspending a sword of Damocles over the life of the individual was more successfully expressed, is an instance of the detachment which he often achieved. But his taste was less certain. Even in the fourth symphony the length of the first movement and the barbarity of the finale have been criticised from the beginning of its life, and while Tchaikovsky candidly admits to an insecure command of form and to doing carpenter's work upon the first movement, he assures us of the sincerity of the finale and is blind to its blatancy, as he was to other instances in his work that give offence to fastidious ears. Most musicians, however sympathetic or admiring, sooner or later admit to a feeling of disgust over this or that work or movement or feature of his style. The contemplative element in fact in Tchaikovsky as artist was overborne by his compulsive industry. Exuberance, which is one element in fertility, which in turn is an essential element in any genius of a high order, is also the main ingredient in vulgarity. It is not insincerity nor superficiality which is the cause of bad art in his output, as is commonly the case with lesser composers, nor is it lack of feeling. For all his life he suffered from hyperaesthesia, and indeed grew old before his time because he continually burned himself out with excess of feeling. The lack of restraint in the expression of feeling which commends his music to unsophisticated listeners is a counterpart to the excess which less naive listeners deem to be vulgarity. Thus the psychological explanation of the vulgarity in the lack of balance between the dynamic and the contemplative side of his genius leads straight to the major critical problem presented by Tchaikovsky. In his case, at any rate, biography and criticism should go hand in hand and not avoid each other as they have done hitherto. For criticism is faced with the problem of evaluating in Tchaikovsky's huge output the symphonic works, symphonic poems, ballet music and suites. According to normal critical values symphonies rank higher than programme or dance music. But this is only a just valuation if other things are equal, and in Tchaikovsky they are not equal, for psychological reasons. His symphonies can be safely written down a little without writing down

for complete achievement, if sufficient credit is given to the symphonic poems and if the superlative merit of the ballet music is fully recognised. The symphonies are too autobiographical, the ballet music too objective, while the symphonic poems are intermediate in that they provide an objective medium for the expression of Tchaikovsky's own abnormally violent emotion. Thus the psychology of the artist may be of assistance in solving an otherwise intractable problem of criticism. Criticism perhaps rather than psychology itself is the gainer by study of the personalities of these and other abnormal musicians. But psychology will be the gainer if it takes account of the phenomena offered by the musical mind in all its variety of natural (musical) endowment, nervous sensibility, emotional make-up—in a word by the artistic temperament.

4. THE PSYCHOLOGY OF LISTENING

THE sting has now gone out of the old epigram "there is nothing so fallacious as facts except figures." Scientific method in the hands of economists and psychologists has invaded the humanities, and the proper study of mankind is now conducted with graphs, co-ordinates and co-efficients. The advantage of employing statistical method in studies of which the subjects are not the strictly ponderable quantities of the laboratory is that a column of figures shows at a glance the relationship of facts and forces which otherwise are extremely difficult to co-ordinate. Its danger is that it invests with a false air of precision generalisations from which it is impossible to eliminate errors and variable factors; if one is not always equal to one in the data, it cannot be assumed that two and two have always gone to make four in the conclusion.

The data, to which statistical method has been applied in the investigation of physical reaction and psychical response to music have been provided mostly by introspection and the questionnaire, though a few purely physical facts such as changes in heart-beat and pulse rate have been noted. The investigator collects from many subjects an account of what goes on in their minds when they listen to certain selected bits of music, and the existence of the phonograph has made possible the elimination of one variable—a stable performance of the music chosen for the experiment is now possible. This introspective method of investigation is not so unreliable as

might be supposed if a sufficient number of subjects are examined—there is safety in numbers. Certain broad classification of listeners into different types has emerged from all such investigations, and though each experimenter makes his own classification into three or five or seven types of musical response and gives them different names, there is enough common ground to differentiate a number of different ways of listening to music. It used to be the practice of psychologists to assign an individual to one or other of the corresponding types of listener, but inasmuch as it is admitted that no one exclusively practices one and only one kind of listening it is a truer account to say that there are so many ways of listening and that such and such an individual on the whole tends to employ one way more than the others. That is, it is better to think of types of listening than types of listener.

A three-fold classification is that of Vernon Lee set out with a wealth of detail that is held together with great literary skill in her delightful *Music and its Lovers*. Dr. C. S. Myers distinguishes four types of response and Dr. Odier, a Genevan doctor, five, which however fall into two main groups. Dr. Philip Vernon, refining on these, distinguishes seven ways of apprehending music. Other similar studies have been made in America but it will be sufficient to find the common measure of these classifications which do not merge into each other by gradations, though most listeners indulge at one time or another in all and certainly pass from one attitude to another in the course of hearing a single composition. Their interest is not purely psychological since they have significance for taste and for criticism.

Vernon Lee, borrowing Nietzsche's terminology, classifies us into Apollinians, Dionysiacs and Cecilians. She further applies the terms "listeners" and "hearers" to Apollinians and Dionysiacs respectively. This is a distinction much used in pedagogy. Sir Percy Buck, for instance, says that hearing is a function of the ear, listening a function of the mind. In listening you certainly focus your attention on what assails your ear, and hearing describes what happens when a sound falls on your auditory apparatus. But such a distinction with its suggestion of the one being meritorious and the other verging on reprehensibility, an evaluation in which Vernon Lee concurs, is nugatory. Hearing would thus seem to be overhearing, and while it is meritorious to pay conscious attention to the matter in hand, there is also merit in being in a receptive rather than an active frame of mind. The Psalmist said "Be still

and in listening to music it sometimes takes one more step to the heart of the matter not to be paying critical attention to the sound itself. The moral evaluation is best left out of it, and the distinction between hearing and listening, which seems to be at the heart of the matter of degree of attention, had better be abandoned in favour of a distinction in the subject-matter of the listener's response as given by introspection. The Cecilians, which are named on Vernon Lee's scale, are those who are worked upon by the sheer power of sound, its voluminousness, sweetness of timbre and the quality which "acts on the helpless blood direct" in the phrase of D. H. Lawrence, which she quotes in describing it. Apollinians are those who find in music a "purely musical" interest, who follow the relations of tone and time, who appreciate the whole harmonic, melodic and rhythmic texture in the same way as they apprehend the organic unity of a tune purely by its relations of pitch and temporal succession. Dionysiacs are those in whom music releases emotional excitements, maybe the emotions familiar in ordinary life, maybe an undifferentiated emotion but in any case a kind of intoxication.

Dr. Myers's four-fold classification is into (1) intra-subjective, (2) suggestive or associative, (3) critical or objective and (4) characterising attitudes. The first intra-subjective experience largely corresponds with Vernon Lee's Cecilian class since it evokes sensory or emotional experiences, organic disturbances originating in or seeking an outlet in minute movements, and even occasionally gross movements of the body like weeping. This class covers all cases of the physical effects of music, to which Dr. Vernon devotes one of his seven categories, and which have been measured by many physicians. It is noteworthy in passing that there is a form of epilepsy† in which fits are brought on by music. The associative response is that which from simple suggestions of movement and colour—by analogy again!—ranges through visual imagery to full-scale day dreaming. Here again we may note in passing the phenomenon of synaesthesia, colour hearing which is not limited to the experience of naive music lovers but is found even among composers.‡ The third class is that of the musical listener who is not bothered by, and does not bother with, sensation or emotion or

† Dr. Macdonald Hastings in *Musicogenic Epilepsy* quotes twenty cases, eleven of them his own patients.

‡ e.g. Rimsky-Korsakov had very keen colour associations with keys—E major for instance was to him dark blue.

associated images. He observes facts of the performance such as that the second horn played too loud. And he, in the person of one of Dr. Myers's subjects, complained of the tone of the three developed phonograph, which was a source of irritation and an intruding factor in the evaluation of the effects of the music in this particular experiment. In the fourth attitude instead of the music being criticised as an object analytically it becomes the subject in which human attributes can be predicated: the music is good or sinister or whatever. This characterising attitude is included by Dr. Vernon in the third of his categories and can go so far with some listeners that a composer's music speaks to them almost in person, his personality is recognised and as it were communed with.

Dr. Odier distinguishes five varieties of listener :

- (1) Those whose pleasure depends on their technical knowledge of the art (plainly the same as Dr. Myers's third class of objectives)—*techniciens*.
- (2) Those whose pleasure depends on the thoughts or ideas suggested by the music—*idéatifs*.
- (3) Those who either consciously or unconsciously substitute images for sounds—*imaginatifs*.
- (4) Those whose pleasure depends on the sentiments or emotion with which they are inspired or which they discover in the music—*sentimentaux*.
- (5) Those who experience an emotion *sui generis* and not to be compared with any other psychological phenomenon: in other words a purely musical emotion incapable of being expressed in other terms—*émotifs pur*.

This last is awarded highest honours by Dr. Odier in the same sort of way as Vernon Lee gives highest marks to her "listeners," who are the same class of auditor. For she explicitly connects emotion with her manner of listening to pure tonal relationships. Four of her sixteen subjects mention some bodily manifestation of emotion and six mention a change of mood as the accompaniment of "listening." His five categories fall into two main classes with the *imaginatifs* as an intermediate between them: they are the intellectual covering 1 and 2 and the sensuous 4 and 5.

Dr. Vernon distinguishes seven fairly distinct types of experience but he allows that some of them may blend, whereas in Dr. Myers's more restricted classification some at least of his four classes seem to

be mainly exclusive—the critical for instance excluding the suggestive and the characterising response. His list is :†

- (1) Direct physical and physiological effects.
- (2) The stimulation of trains of ideas and wandering of attention.
- (3) Emotional reactions or interpretations and dramatic and visual images.
- (4) Muscular reactions of various parts of the body (kinæsthetic effects).
- (5) Many types of synæsthesia, including colour-hearing and absolute pitch.
- (6) Auditory images and intellectual processes.
- (7) The effects of non-musical stimuli, including social and temperamental reactions.

The physical reactions of 1 and 4 may be removed as common to all experience of music and liable to be found with any or all of the others and so may the extraneous factors of 7. No. 2 corresponds to Vernon Lee's "hearers" who belong to the Dionysiac class along with those in category 3. No. 6 are her Apollinians who in Dr. Odier's and Dr. Myers's classification appear in the somewhat un-sympathetic role as "technicians" or objective critical people who do not feel what they hear, who have, it would seem though so much is never said, lost their native love of music in the interest they have developed in it. The characterising attitude, which is important, could correspond to Dr. Odier's *imaginatifs* and would go in with the wide class of Vernon Lee's Dionysiasts.

We reach fair agreement therefore that listening can produce four major kinds of response :

- (1) Physical, organic and sensuous.
- (2) Emotional, undifferentiated emotional excitement, mind wandering, free association and suggestion, reverie.
- (3) Characterising in which music symbolises something else along with itself, in which music becomes a language capable of conveying thought about real life, conveying definite feelings, picturing situations.
- (4) Purely musical, which is critical of the *materia musica*, which according to some accounts is accompanied by a peculiar

† Mus. Ass. Proceedings 1932-3.

emotion *sui generis*, though this is disputed by others on the ground that such an emotion has no basis in instinct and is therefore an unwarrantable postulate. The value of this kind of response is put as highest by some but is ranked lower by others, who see in it neither the emotional nor the aesthetic satisfaction (i.e. experience of beauty) which any music worthy of the name ought to give.

The listener may pass from one to the other of these states of his attention and some mixture is possible, as when reverie will solidify into characterising or when a physical reaction of tears leads to emotion and from that to thought about the imagery evoked; an awareness that the second horn is still playing too loud may strike across the complex mental state without disrupting it. The musician observing the striking effect of a modulation is less likely to reflect on the composer's hysteria, if it is Tchaikovsky, though he can hardly help noticing it, than the naive listener, but he too may still be moved to tears or to vague excitement. Listening then is an activity which fluctuates in quality and in intensity, and is selective. Mursell writes of it that "the view implicitly held by many musicians that there is a single ideal type of listening and that all others are more or less illegitimate is one that the psychologist cannot entertain." Certainly the critic should not so limit his attention to one kind of response. His business is to come not only with an open mind, but with an open nervous system, an emotional neutrality and an expectant attention. The music can then work its own will upon him, and he will select his response to the total complex of the musical experience by the aspect that comes uppermost. Other aspects will not pass him by, but he must first decide whether the main outlines, the general message, the predominant mood commend themselves to him or can be judged as successful representations of the composer's intentions. Not till that has been accomplished should he consciously redirect his attention to his other responses. (The process is not of course a temporal sequence as the words used to describe it suggest; it is rather a matter of degree of importance). This point of criticism has been very well made in a field other than aesthetic response, namely intellectual argument. Bertrand Russell writing of the modern attitude to Greek philosophy says: "In studying a philosopher the right attitude is neither reverence nor contempt but first a kind of hypothetical sympathy, until it is possible to know what it feels like to believe in his theories and only then a revival of the critical

attitude, which should resemble as far as possible the state of mind of a person abandoning opinions which he has hitherto held."† This hypothetical sympathy, it seems to me, is essential to good criticism of music, and the critic can most easily obtain it by allowing the music to engage him in any of the four main ways. He himself no doubt tends to belong by habit and by temperament to one type rather than another of listening and this personal equation will appear in his criticism, but his readers will recognise it and allow for it.

The only difficulty of this classification of listening is the unresolved disputes in the fourth category. Is the emotion of art *sui generis*? and is "listening" in Vernon Lee's sense, the attention to the notes and their relations, the same thing as that critical objective response which notices technical features like modulations and faults in performance? It is unlikely that Vernon Lee would identify the purely professional, critical attitude with that "purely musical" activity of following the purely musical thought in a symphony of Mozart, which she would claim to be altogether a different matter from noticing what the second horn is doing or even that the music has now passed from Exposition to Development. My view, which is implicit in and has been explicitly expounded in these pages, is that "purely musical" relationships are no more real than "purely verbal" relationships in a sentence. The sentence carries a verbal beauty perhaps, has a grammatical construction and permits a play on words, but it also carries meaning. In music the sounds likewise carry beauty and meaning and if the meaning is less specific and the beauty more important than in language, as is certainly the case, it still does not necessitate the postulation of a "purely musical" emotion and a "purely musical" kind of thought. The grave difficulties of accounting for a purely tonal emotion and for postulating an indefinite kind of thought are thus avoided. The peculiarity of music is not in its thought or its feelings, which are universal and are encountered in the other arts, but in the medium. The tonal medium has certain peculiarities, certain limitations, certain powers, and these determine the fact that it can convey emotion accurately but not a deductive argument, that its speculations about the nature of the universe may well agree with those of a philosopher or a mathematician but cannot be couched in the same terms, that some topics suit the medium well

† *History of Western Philosophy*, p.58.

and others less so. It is tempting to say that music's unique appeal is its musicalness and that what it signifies, in so far as it can be conveyed in other media, is less important than the musicalness. But the significance is embodied, but it is neither the truth nor the matter is scrutinised, to say that it is the thought-content that is unique, just as the individual person is unique because he is body and soul in one, not a beautiful soul inhabiting or employing a merely useful body, nor a handsome body with a distinguished or commonplace mind attached to it. Medium and thought-content are similarly unique, even if the content is common to half a dozen arts, crafts and sciences.

If, however, the conception of the "purely musical" be rejected as the object of listening, some account must be given of what is every listener's experience. His activity is contemplation: he contemplates a formal musical structure and he receives a communication from it which is couched in a sensory medium and is often of an emotional character. The contemplation, though apparently the very opposite of the activity of making music by a performer and the last stage in a process which began in the mind of a composer, is in fact the distinguishing criterion of all art: all art aims at being contemplated, not only by an audience but by its maker. The psychological root of art is in instinct, or, since that is a perilous word, let us say an innate impulse. What impulse, we have already asked, play, sex or construction? These three are not the same instincts but they possess a common creative element. Let us say that art starts from the instinct of constructiveness, which man shares with animals like the beaver and the bee. What he constructs, however, is destined not for use or any ulterior purpose but for contemplation and contemplation for its own sake. The satisfaction derived from such contemplation is the experience of beauty, and this experience may properly be called an aesthetic emotion. In this way both the emotion of the creator and of the recipient have an origin satisfactorily accounted for in an instinct; in this way the metaphysical doctrine is satisfied that beauty is not inherent in the object but is a subject-object relationship in the mind. The composer, the performer and the listener share some common ground, namely sensibility to sound, they employ the same medium and there is no reason for thinking that their responses (of the four kinds previously recognised) are not the same: they are all musical. But creating is one thing, recreating in performance another, and criticising (as the most sustained kind of listening) is yet another, so that the psycholo-

gical account has to undergo slight variations of emphasis. The composer, proceeding in some such way as has been suggested from a stimulus to his imagery to make something in his chosen medium of sound, is full of the instinctive activity of construction—*what* he makes will be coloured by his emotional make-up, by his experience of life, by his environment and the mental climate of his age. Having made it he must contemplate it for a moment, if only to satisfy himself that he has actually said what he means. The performing musician, taking up the composition, does a good deal of contemplation. "I see," he says, "what the fellow means," and proceeds to play it : contemplation and activity being about equally balanced. The listener is wholly receptive : he contemplates the performance of the work offered to him and finally says "Yes, I see what it means" and his only activity is one of musical comprehension.

Pure psychology—the psychological study of listening—has thus become psychological aesthetics. Which is as it should be, for no account of musical experience can be satisfactory unless on the one hand it is in accordance with the facts of experience (i.e. is psychologically true) and fits into psychological theory (such as a sound doctrine of the emotions), and on the other is philosophically defensible (so that for instance its account of beauty shall make sense).

SOCIOLOGY AND MUSIC

How far is music a social phenomenon ? How far, if such it is, will it impinge on man's social organisation, on government and on politics ? And how far need politics interfere with music ?

Musical activities make some appeal to the herd instinct. It is indeed a fertile source of societies created within Society. Choral societies exist to promote communal singing among those who care both for singing and for co-operating with other like-minded persons in the pursuit of a disinterested ideal—to sing unto the Lord or to sing for singing's sake or to gratify an audience. Philharmonic societies exist to promote the practice of music and again to bring together like-minded enthusiasts with all the paraphernalia of committees and vice-presidents and the minutes of the previous meeting. Musical societies even exist for the discussion of musical science, history and aesthetics—such is our Royal Musical Association. Community singing is a social activity of the simplest sort. Choral singing and ensemble playing are more highly organised forms of artistic co-operation which draw for their motive power some emotion derived from the herd instinct. The joy of doing things in association has all the marks of an instinctive satisfaction and when that something is an activity like music, which in itself is delightful and provides the occasion for a co-operation of the utmost subtlety, it is small wonder that enthusiasm unites the participants in a very close bond. Audiences, being unorganised and heterogeneous, are bound less closely in their chance association, but do in their common admiration of a fine performance achieve a momentary gratification of the herd impulse and constitute a temporary social unit.

These manifestations of the herd impulses and the more spiritual ties of the closer co-operation in musical activity, such as is provided in the playing of chamber music or by singing in chorus, are beneficial to society, and a nation is said to have a musical life, just as it has an economic or a religious life, which is made up of the aggregation of such activities. But such music-making, such membership of an audience, does not really affect the larger movements of society. It makes for health in the body politic maybe, but it does not influence policy, shape laws, regulate the production and distribution of

wealth or, in short, play a part in politics. On a superficial view it would appear that music and politics have nothing to say to each other. Indeed its detachment from affairs is often claimed for it as one of music's most valuable characteristics. This view, however, is not universally held and a number of poets and philosophically minded publicists have held the contrary view that music is potentially dangerous to the state. This view was enunciated by Plato and acted on by Dr. Goebbels. Plato at any rate thought that for the ruling class certain kinds of music were too effeminate, and in Russia to-day music based on or depicting subjective emotion is frowned on by the political authorities. The notorious case of Shostakovitch's disgrace in 1936 crystallized the Communist view of music's political implications, though the actual amount of liberty permitted to Soviet artists has varied within limits according to the political temperature. It is no doubt more difficult even for a Soviet critic or official to say whether a symphony offends against "socialist realism" than a play or a work of literature, where specific ideas can be measured against the standard ideology; operas and ballets with extra-musical subjects are more easily subject to accusation than abstract music. Nevertheless certain broad traits can be discerned as permissible within this strange category of socialist realism, and others to be guilty of "aesthetic-formalism." Mr. Gerald Abraham,[†] who has translated the article of excommunication in *Pravda* in which Shostakovitch was denounced for *The Lady Macbeth of Mtensk*, and has expounded for western readers such of the Russian criticism as makes these new canons of judgment most clear, summarized the essential qualities required in music by Communist ideology and Soviet official approval, as "clearness of texture, melodiousness, general comprehensibility, optimism, 'the monumental' and of course an 'address' to the proletariat." The article in *Pravda* complained that the listener to Shostakovitch's opera is dumbfounded by a "deliberately discordant, confused stream of sounds . . . All this arises not from the composer's lack of talent, but from his not knowing how to express strong and simple feelings . . . The composer has never asked himself what a Soviet audience expects in music. He has written music in code, so disgusting that it can appeal only to aesthete-formalists who have lost all healthy taste."

The discordance of modern music is a universal complaint and is

[†] *Eight Soviet Composers.*

always quoted as specific evidence for the badness of the music. But an even more striking congruence of this criticism with another made in another country about the same time (1934) may be seen in this pronouncement by Dr. Goebbels on Hindemith's *Neues vom Tage* after an attack on the moral decay of atonal composers :

"Technical mastery is not an excuse but an obligation. To misuse it for meaningless musical trifles is to besmirch true genius. Opportunity creates not only thieves, but also atonal musicians who in order to make a sensation exhibit on the stage nude women in the bathtub in the most disgusting and obscene situations, and farther befoul those scenes with the most atrocious dissonance of musical impotence."

These political critics of music are unaware of the purely technical reasons for experiments in dissonance and atonality. The major-minor key system had had a fair run of nearly three centuries when attempts to discard it in favour of some other method of tonal organisation began to be made by Debussy for one, by Schönberg for another in development of Wagner's chromaticism, by Strauss in the case of discord for expressing the more violent emotions, by Stravinsky in the possibilities of non-metrical rhythm and by all the experimenters in polytonality, neo-modality, linear counterpoint and the rest of them. By the time Brahms died in 1897 there was a general feeling that the current system of tonality was exhausted. Another factor making for greater dissonance, partly psychological, partly technical, was the undoubted demand of the ear for stronger dissonance to propel music : dissonance has a rhythmic function, but the ear has a way of acclimatising itself to stronger dissonance so that it becomes comparatively static. A minor third was at one time an intolerably harsh ending to a composition and had to be resolved by a *tierce de Picardie*. But the ear soon conceded the minor third as consonant, and the process of accepting the milder dissonances as consonances has gone on till Delius needed an added sixth in a final tonic chord in order to give it some positive flavour—flavour but not movement. Dissonance therefore was increasingly used in the twentieth century (a) as flavoured consonance, (b) as stronger rhythmic propulsion and (c) for expression of violent emotion. This last has perhaps some social significance, and it is possible to argue that the purely technical urge to the more extensive use of dissonance had some spiritual counterpart either in the psychology of the individual or in the state of society.

Indeed many who smile at the crude correlation of music and

politics implied in the autocratic (Plato-Goebbels-Stalin) interference with musical expression would possibly admit that violent, discordant, experimental, perverse music is at any rate a symptom of some social malaise in the body politic. To the western mind, which has been accustomed to freedom of expression in the written and the spoken word after long campaigns waged against oppressive governments, the interference with expression in paint (as it might be against Picasso's war-period pictures) or in music, even such trivial music as the music-hall songs banned by the Russian government in 1947, is laughable—"Tipperary" and "A Tavern in the Town" were condemned as "migrants from the bourgeois music-hall which cannot interest a Soviet audience," though they were popular enough to be frequently broadcast from Moscow, and "that most stupid music-hall ditty 'K-K-K-Katie'" was indicted as "capable only of ruining the taste of a Soviet audience." But it is only laughable on the axiom that freedom is desirable. The incompatibility of freedom with equality, with a planned economy, with a purposefully directed social organisation (whether in peace or war), has only just begun to appear in this country. The price of freedom is not merely eternal vigilance, it is also the sacrifice of some of these socialist ideals which are highly valued in this century. The nineteenth century was clear that it valued freedom above them, the twentieth century is not so sure. The Russian, like other totalitarian governments, is quite sure—liberty is a luxury that an egalitarian or a collectivist or an autocratic organisation of society cannot afford. It is therefore acting logically, if with some lack of a sense of proportion, in banning or frowning on such music as it judges to be expressive of ideas and ideals that it regards as socially undesirable. The appeal of a music-hall song like "Tipperary" can only be regarded as a symptom not as a cause, and it is not good doctoring to suppress symptoms. The Russians therefore would have a better case in suppressing Shostakovitch than in altering the plots of imported operas or prohibiting music-hall songs.

The view that music is symptomatic of the state of society can be sustained by much recent musical history. At the low level of the music-hall song the exuberant vitality of the Edwardian ditty as compared with the trailing "number" of to-day is indicative, while the inanity of both may be granted to be equal, of a loss of the gusto of living as the result of a major war. Sousa's marches compared with jazz blues or even with the unenthusiastic foxtrots of the inter-war decades, tell the same tale for America. The music of Kurt

Weil (at any rate in so much of it as has come my way), though satirical in intention, is nasty with the nastiness of Berlin night-life in the late 'twenties. It seems to me to be no accident that the two most violent symphonies of modern times—Vaughan Williams's in F minor and Walton's in B flat minor—both came out in 1935, the year when Mussolini's invasion of Abyssinia proclaimed openly that violence was the governing force in European politics. The English composers were far enough off in the physical, geographical sense, as to be also psychologically distant enough from their subject-matter to enable them to digest it into art—recollection in tranquillity was a matter for once not of time but of space. Those symphonies spoke of the world in which their composers, their interpreters and their audiences were living. No one would take them to be incitements to further violence, they could not be called Fascist symphonies which a wise government would ban, but they were artistic symptoms of the state of Europe. Composers do not in fact live in ivory towers but in the world of their fellow men, and their music, rooted in their individual personalities, does yet reflect the state of society. The case of Beethoven and the issue of liberty and heroism has been already discussed in more than one context and need only be put in here as additional evidence.

If music is a symptom of the state of society it follows that the state of society will determine the kind of music that is written at any given period. The *kind of* music; not the actual music—that is determined by the individual genius of composers. But the larger movements of musical history are socially determined. One does not need to accept the full rigour of the Marxian interpretation of history to recognise that sixteenth-century polyphony was a product not merely of a religious impulse but of an ecclesiastical order; that eighteenth-century opera was the outcome not only of a passion for singing but of a leisured society in which wealth and formality provided a frame for the expression of exuberant feeling; that the rhetorical appeal of orchestral music since Beethoven is not merely a matter of improvement in the construction of wind instruments but of an extended franchise among an educated bourgeoisie; that folk-song, created and preserved by an oral tradition, does not in fact flourish among an urban proletariat as it does among a rural peasantry, but that jazz is the sort of thing to come from the American negroes of waterside slums. Criticism has always paid lip-service to the idea of music as a social product in so far as it recognises that style has been shaped by social conditions. It

goes so far as to point to Bach's cantatas and organ works as products of provincial Protestantism ; it has flirted with the idea that somehow the French Revolution must have been in part responsible for the difference between Beethoven's and Haydn's symphonies, since Beethoven and Haydn employed much the same apparatus and were musically like-minded, but lived different social lives—Haydn as a feudal servant of the aristocracy, Beethoven as a free man earning the living of a free lance (a distinction which can be overdrawn, since patronage played a great part in both composers' economies). It has carefully detailed every composer's environment as a help to the appreciation of his music. Social forces have not been left out of musical criticism but there has not been much attempt to trace specific links between musical technique, stylistic features and social phenomena. Where the attempt has been made, as by Mr. Rutland Boughton in *The Reality of Music*, or from a strictly Marxian point of view by Mr. A. L. Lloyd on English folk-song, the results have been far from convincing. The main defect of a Marxian interpretation of musical history is that it approaches the facts exclusively from the producer's side and leaves out of account the consumer and his use of the commodity. Music is not only to be composed ; it is to be played and sung and even to be listened to and enjoyed. Even when it is production that is under discussion it is easy to explain too much by the class war. Mr. Boughton, for instance, accounts for that admittedly unaccountable absence of lullabies in English folk-music by the decline of agriculture in the fifteenth century and the rise of industry in the nineteenth, while Mr. Lloyd mistakes the modal character of English folk-song for melancholy induced by landlordism and the poverty of labourers. He speaks of the "exotic" beauty of the tunes, the last epithet that can be applied to "Searching for Lambs" or "The Seeds of Love" or even to "The Captain's Apprentice," or "The Evening Prayer," whose Phrygian mode is certainly uncommon. The first impression made by Dorian and Aeolian tunes on the ear accustomed to the major-minor scale system is no doubt one of strangeness and of the minor mode intensified ; but just as it is only a superficial acquaintance that finds the minor mode invariably sad, so familiarity with the modal folk-song suggests rather contemplation than melancholy, and even contented rumination upon pastoral life. The facts have to be selected or misinterpreted if they are to fit Marxian theory.

Music is not of course exempt from the pressure of economic forces, but the pressure is not exerted direct : economic forces help

to mould society and society has a formative influence on what is created in, by and for it. The more rigidly and specifically social determinism is applied to music the more error creeps in, the more simplification; the more loosely is the doctrine formulated, the more acceptable it is. Thus in Dr. Ernest Meyer's book on the history of chamber music technical and social forces are considered in their interaction through a couple of centuries from the time of Purcell, and what emerges is that apparently unrelated phenomena like plainsong and counterpoint, dance measures and variations are related to sea power, economic expansion, the rise of Puritanism and the existence of a mercantile bourgeoisie, by the mental climate of the age.

To the making of a mental climate go many factors of which economic conditions and social organisation are certainly two. Purely intellectual factors were also operative in the great changes that came over the whole of man's spiritual life between the fifteenth and nineteenth centuries represented by Renaissance, Reformation, Scientific method, Rationalism and Romanticism. Dr. Meyer quotes two opinions about the function of music that are illuminating instances of a specific change of view wrought by the larger movements of thought. To Morley in the sixteenth-century music was a "ladder to the intelligence of higher things," to Dr. Burney in the eighteenth, it was "an innocent luxury, unnecessary, indeed to our existence, but a great improvement and gratification to the sense of hearing." This last practical utilitarian view, which pervaded every department of life, was brought about by the Baconian philosophy, Cartesian mathematics and Newtonian physics of the previous century. "In so far as the intellectual climates of different epochs can be contrasted" writes Whitehead, "the eighteenth-century in Europe was the complete antithesis of the Middle Ages . . . The Middle Ages were haunted with the desire to rationalise the infinite: the men of the eighteenth-century rationalised the social life of modern communities, and based their sociological theories on an appeal to the facts of nature. The earlier period was the age of faith based upon reason. In the later period they let sleeping dogs lie: it was the age of reason based upon faith." And elsewhere "For a thousand years Europe had been a prey to intolerant, intolerable visionaries. The common sense of the eighteenth-century, its grasp of the obvious facts of human suffering, and of the obvious demands of human nature, acted on the world like a bath of moral cleansing." But, he continues, man cannot live

on disinfectants, and the defect of the eighteenth-century scientific scheme, which had emancipated thought, humanised government and begun material enrichment, was that it provided none of the elements which compose the immediate psychological experiences of mankind.* And so there came about the Romantic Reaction—with what results to music we all know. It would be very well worth someone's while to examine the main change that came over music in the middle of the eighteenth-century along these lines, to do for it what Dr. Meyer does for English chamber music of the seventeenth-century by relating it to social changes and then to go on and relate it to the larger changes of the mental climate. The study locates itself nicely within the Bach family: Sebastian ended an epoch of grave, monumental, serious, contrapuntal music (the list of epithets could be enlarged till it was exhaustive), Philip Emanuel and Johann Christian inaugurated the *galant* style, the lighter texture, sonata-form structure. How did that come about? To what deeper causes do we owe the difference between the finale of the second Brandenburg concerto of Bach and the finale of the "Drum-roll" symphony of Haydn? The purely musical ones we can identify, those that lie in the realm of taste we epitomize in the word *galant* with its desire to please, to entertain, to be a little sentimental. But the political ones are more difficult to disentangle, since every country in Europe was at a different stage of humanism, enlightenment and liberty. In England the wars of religion had ceased and political tolerance had been born of the agony of the great Civil War a hundred years before. In Germany there were petty courts—and Frederick the Great, an enlightened despot. In Austria there were the struggles whose images we can see in the distorting mirror of *The Magic Flute*, which the house of Hapsburg dealt with more successfully than the Bourbons in France, where the forces of freedom and a fuller life could only escape in a huge explosion. Sometimes a technological advance produces an invention (like the internal combustion engine or the electric telephone) which affects the mental climate, but it is not easy to see anything of the sort at work around 1750. But we should seek deep and wide for the root origins of so magnificent a vehicle of thought as sonata form.

If music—some sorts of it—was considered politically dangerous by Plato, who thought that philosophers should be rulers, it has

† *Science and the Modern World* by Alfred N. Whitehead pp. 74 and 92.

never been so considered by English thinkers. Cecil Forsyth once propounded the opposite thesis, that politics is destructive of music, in order to explain how the formation of an empire synchronized with the sterility of her music by Britain—salt water sterilized music, not apparently painting or poetry. And a few poets have been the music with political influence. Andrew Fletcher of Saltoun wrote to Montrose that he knew a very wise man of the opinion that "if a man were permitted to make all the ballads, he need not care who should make the laws of a nation," which is Scottish in its character (he knew a wise man who thought it, but did not commit himself) and only partly involves music since the tune is the less important half of a ballad. O'Shaughnessy made larger claims in his ode when he wrote :

We are the music makers
And we are the dreamers of dreams

.
World losers and world forsakers

.
Yet we are the movers and shakers
Of the world for ever, it seems.

With wonderful deathless ditties
We build up the world's great cities
And out of a fabulous story
We fashion our empire's glory

.
And three with a new song's measure
Can trample a kingdom down.

But he cites no evidence and finds little support. Rather on the contrary music is more generally valued for its detachment from politics. It has sometimes, it is true, lent the emotional force of a great tune to a political cause. There are a few songs that have made history, "Lilliburlero" and the "Marseillaise" for instance, but not many. Emotional contagion is the only force that music can exert. Politics is concerned with power—who has it, who exercises it, and in whose interest. And power like law, government by debate and the organisation of social life, is apparently incommensurable with music. Music has nothing to say to the by-law which forbids the riding of a bicycle on a foot-path, nothing to say about the staffing of a modern police force, though military bands do

of the circumstances. Perhaps the best test case for the connexion of music and war is war, for war goes down to the deepest springs of human nature and releases powerful emotion, such as might produce a substratum for works of art.

Yet the evidence against war providing any inspiration for great work of music is that there is no musical Iliad in existence, only a few little pieces of a superficial character and little worth, and some great ballads, no doubt, where the poem has fashioned for itself a tune from the folk-singer or inspired a composer of a later age to make it into a choral cantata. Stanford's *Revenge* is an extremely good little work but its connexion with any actual fighting is remote and tenuous. The two huge wars of the present century have not produced great music but they have produced a great hunger for music's solace and encouragement. This indeed is the chief effect of war upon music—it has stimulated consumption rather than production. The second German war increased in this country at any rate the demand for music, reduced its supply and lowered the standards of performance: more people were anxious to hear worse performances to assuage what they had come in the absence of normal pleasures to feel as an increased spiritual need.

The new widespread interest in serious music was not wholly created by the war, since the ground had been prepared by twenty years of wireless broadcasting and by the more assiduous attention of gramophone users, but the appetite for music was unquestionably sharpened by the mental stress of war. Under the psychological strain of war people needed relief, solace, and the heartening reassurance that beyond the intolerable present the eternal values remained unimpaired. Organised religion, which would be the most likely resort for these consolations, no longer satisfied so many people as it would have done before the weakening of faith; what was needed was a creedless revelation of the eternal, which is precisely what music is in some at any rate of its highest manifestations. Music was encouraging—it was found by experience that to listen to great music did in fact put heart, put courage into one. It stood in a world of rampant disorder, of planned disorder and calculated destruction, as a symbol of order prevailing somewhere in the universe. It is almost independent of material disaster. I recall two vivid experiences of my own in which this sense of the indestructibility of music was borne in on me. I remember playing over in the first days of the war some new records of Brahms's first symphony which had come in for review.

The black-out symbolised the new insecurity, and though no bombs came the threat of them made everyone aware that the foundations of life were shifting towards the abyss. The symphony began with the note C in octaves. Its only shape at the moment of beginning was rhythmic—the drum tapping out its steady six quarters to the bar. There could hardly be a more rudimentary datum for any musician to use for conjuring something out of nothing. But at once the process of creation at once unfolds itself: whatever germ is in that initial C requires no lengthy incubation; it expands at once in a great trajectory of sound that soon roofs in the listener until he finds himself by a miracle enveloped in an edifice of tone whose walls and soaring dome have the insubstantiality of gossamer and the insulating properties of asbestos. A month or two later I found myself in Queen's Hall listening to Sir Thomas Beecham playing a symphony of Mozart. Again the experience was the same: the world and its wickedness were shut out, and the envelope that enclosed us was still more like gossamer since its film was shot with the iridescence that is Beecham's personal contribution to orchestral tone. Here was a piece of experience irrelevant to and exclusive of the issues that dominated the mind in time of war. As a symbol of order in a world gone mad it was so striking that it set me asking myself in metaphysical terms whether this world of order and design was not more real than the painful world of political quarrel. I checked this line of thought however by asking myself what happens to the music if a bomb comes through the roof. Plainly my insulating envelope of music will not withstand the *sforzando* of an explosion.

In both experiences the sense of envelopement, which meant living for the time in a different world from that of the one in which a war was going on, was strong, but in Brahms the independence and immortality of the symphony was more in evidence, in Mozart the thinness of the partition between these two worlds of different realities.

To this mode of experiencing music two names have been given, one by aesthetics and one by psychology. Aesthetically, the experience of music from within has been called "ambience," and has been likened to the appreciation of architecture which encloses the spectator with space and light. "Architecture and music" says Vernon Lee† "have therefore the common property of putting us

† *Music and its Lovers*.

inside of a sensorial whole different from what we ordinarily live in: and, in so far, both architecture and music give us a very peculiar feeling of being in an unusual element, and moreover shut into that unusualness which is space and light in the one case and sound in the other." Psychological criticism has invented the term "escapism" to designate those uses of the imagination which run away from reality (in Freud's use of that slippery word). Freud, it will be recalled, postulates two principles: the reality and the pleasure principles, which pull us in different directions, and so drive us literally distracted unless we can integrate them in our lives. When real life becomes unbearable we try to escape from it in fantasy. "Escapist" is therefore mostly used in a pejorative sense. But few will find it reprehensible to refresh their souls with a symphony. Indeed if you want to retain your sanity, it is well from time to time to turn from the contemplation of starvation, cruelty, death, political folly and immeasurable misfortune and instead attend to the positive goods that life has to offer, of which art is one of very high potential. The escape is into a different order of experience, and all art is in some measure escapist, in the sense that in art we plunge not only into a different "sensorial whole" such as Vernon Lee speaks of, but into a different order of being. How then do we relate them to each other, how integrate our manifold experiences on different levels of reality?

We all seek such an integration of experience. Many find it in an over-riding religious faith. To others faith is an added difficulty in that it may involve what the schoolboy defined as "believing what you know to be untrue." Some evolve for themselves a more or less consistent philosophy; others are pragmatists, who without trying to harmonise incompatibles accept anything so long as it works. But whatever we do or do not do to encompass it, we find this integration a supremely difficult task—none other than making sense of the world in which we live.

War provides an instance of the incompatibility of two recognisably distinct though inter-connected modes of experience: it is as flagrantly wrong in morals as it is in economics, yet few questioned, and fewer still denied, the categorical rightness of fighting a war to restrain aggression, which is a political act. Freedom and toleration, for which the war was fought—though alas! they are among its casualties—are political virtues which have no less validity than the abstinence from violence and senseless destruction which is a personal virtue. Morals and politics, in fact, point different ways,

and their contrary demands are only reconciled by reference to a third principle of conduct, namely social well-being. Sex offers examples of similar antinomies : it has, for instance the character of a separate, distinct and vivid experience, yet it also pervades with an undoubted but not easily identifiable influence the rest of life. Separateness and pervasiveness are reconciled in the mystery we call love, but except at weddings and in the divorce court we segregate it into what we call our "private lives." Is there then a gulf between our public and private lives ? Must biology—for war and sex are both biological phenomena, forms of struggle and survival—always disrupt, whenever it impinges upon the other orders of our being—the moral, the social, the political, the aesthetic ?

Music, it seems, lies somehow outside these other realms of experience. It is as though in musical experience we move on to a different plane. It is not so much that music and politics are incompatible as that they never meet : they are like two circles whose centres lie outside each other and whose circumferences neither touch nor intersect. This is superficially a plausible view, and many good musicians hold it with conviction because it seems to secure for their art an independence, a purity, a self-subsistence and a validity in its own right as absolute as that of pure mathematics. But it will not really do. For music is only one of the arts, and it would be hard indeed to maintain that art as such has no social importance, is unrelated to individual human emotion, serves no biological end, reflects nothing of the environment in which it is born, or—in a word—means nothing. Whatever else it is, art is communication between minds, and what it communicates can only be the experiences of life. However tenuous the connexion, however obscure the relationship, music belongs to the rest of life, that is to morals, politics and biology, to intellectual adventure, emotional fulfilment and purposive activity ; it is more than the tracing of evanescent patterns in the air ; it has in fact a meaning for us, however strongly we feel that in the form of its communication it is *sui generis* and untranslatable into other mediums.

If that is so we are faced once more with the problem from which we started—how to integrate the incompatible experiences of war and music. As political animals we fight, as musical individuals we seek the peace which has no connexion with victory : the nihilism of Hitler had no relevance to Brahms ; Mozart was so far above the battle as to make the memory of the war like that of toothache when it is over.

The experience of the first German war throws an odd confirmatory light upon the recalcitrance of warlike and musical experiences in the human heart. For all its emotional disturbance, for all the intellectual ferment it left behind, for all the social questions it raised but failed to answer, for all the raw material of art which, so one would suppose, it put in the way of the artist, it brought forth no great music with which to console the world for its suffering. Plays—yes; novels in plenty; poetry, some of a high order; painting and sculpture, a modicum even if it was the product of an official commission; but of music very little. Here in England a couple of noble tunes from Parry struck red-hot from the immediate experience of the nation at war, a trilogy of cantatas from Elgar before it had begun to cool, a work of oratorio dimensions from Bliss (*Morning Heroes*) when there had been time for its passions to be recollected in tranquillity. Did Strauss or Sibelius, did Ravel or Falla, find any inspiration in a European war? Strauss merely wrote to von Hofmannsthal that he wished the thing would stop so that they could get on with their proper work of creating operas. The composer finds no use for the stimulus of war, but serving soldiers and war-harrassed civilians alike found in pre-existing music solace and encouragement, tranquillity of mind and refreshment of spirit. Why?

The common answer that music is a spiritual necessity, especially in time of war, is true but is not sufficiently explicit. There are at least two reasons why we feel both the incompatibility and the connexion of music with war; one is psychological, and the other is philosophical. Plato put them both together in the sentence already quoted from *The Republic*: "Rhythm and harmony (meaning musical experience) enter into the inmost core of the soul and fasten most powerfully upon it, imparting order to it, and making its possessor a harmonious person." In other words, music gets at the mind subconsciously and acts beneficially upon it. But, further, its graciousness and order reassure the full consciousness of the alert mind that these principles exist in the universe. Evil has no meaning without reference to good, chaos is beyond our grasp unless we think of it as the opposite of order, whose nature we directly perceive. Here then is our integration. The biological explosion of war lets loose upon the world all manner of evil, of disorder, of ugliness. We cannot even begin to understand these things, let alone cope with them, unless we know their opposites. Our knowledge of good and evil, of order and disorder, of beauty and

ugliness is only complete if we hold fast to the good, the orderly and the beautiful of which we become aware by direct intuition in the experience of music.

It is only at these deeper levels that the connexions of music with the social sciences can be traced. It is commonly said that for any particular political ill there is no immediate cure, only by prolonged education can major changes in the body politic be brought about. So with music and society—the inter-actions are slight at the surface but pervasive at the roots, whether we are considering the influence of society on music or of music on society.

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